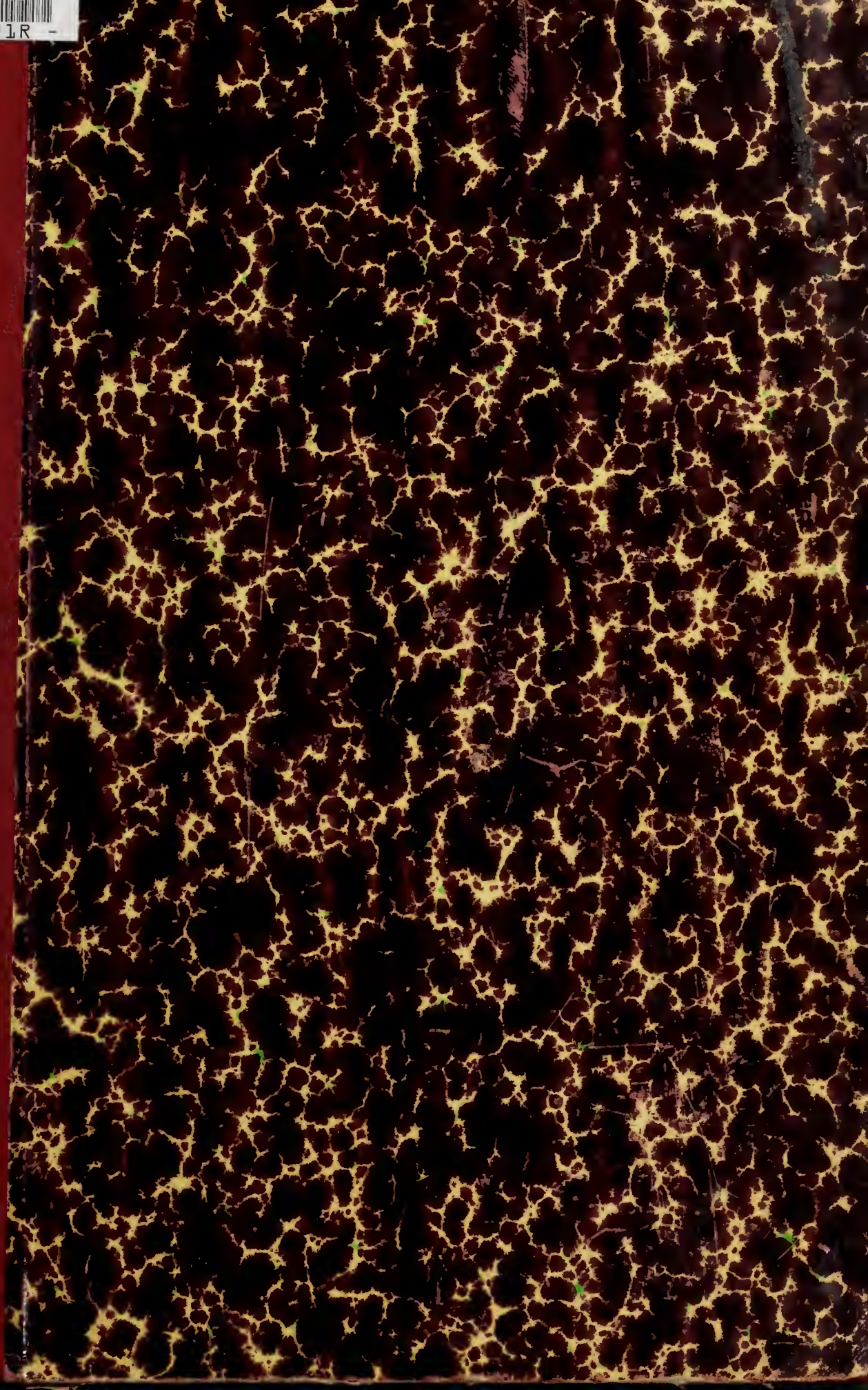


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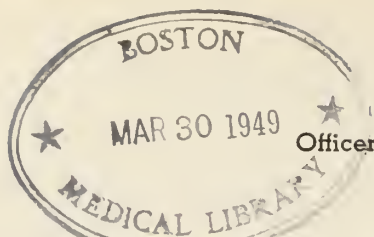
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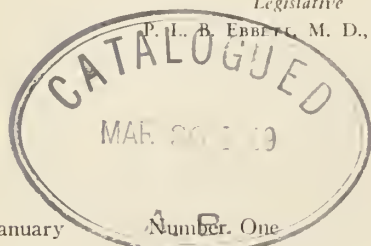
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The Journal of the Maine Medical Association

Volume Thirty-nine

Portland, Maine, January, 1948

No. 1

Allergy and Skin Disease

MARTYN A. VICKERS, M. D., Bangor, Maine

It is my desire in this short paper to try and show the need of a greater consideration of the fact that more and more allergy is responsible for many dermatologic upsets. Let us review a few facts which are accepted by all.

First: Many bacteria, fungi, pollens, foods, chemicals, etc., have the ability to sensitize the skin. This is obviously demonstrated in bacteria by the use of such tests as the Tuberculin Contact (patch), Intradermal, etc. The specific reactions to many fungi such as *alternaria*, *aspergilla*, etc., are also of value when the clinical history makes these associations a consideration. You all know too well the many rashes seen resulting from the intake of food and from the contacting of chemicals in the various industries such as our local plywood, wool, and shoe factories. Add to this list of chemicals some of our new antibiotic drugs such as the Sulfonamide group with their terrific skin sensitizing ability, and one realizes the increased importance of this consideration.

The need of pollen and plant contact considerations in the spring, summer, and fall seasons is necessarily great in a state such as ours where so many people spend their leisure time

on lakes, streams, and in camps, or making their living from the land. It is my experience that although poison ivy is widely known as a great source of trouble, many other plant contacts are of great concern.

That one might go on talking about contacts indefinitely is only made more obvious when one considers the many new chemicals used in insecticide control, insulation material, plastics, etc.

In the field of allergy we frequently talk about the familial (inherited) and the acquired type of sensitivities. Beyond any question of a doubt one can frequently distinguish between the eruption caused by the ingestion of food, medicants, etc., in contradistinction to the rashes resulting from contacts, but it is also obvious that occasionally the identical rash may result from either contact or ingestion. This makes one wonder whether the demarcation is as clear cut between an acquired sensitivity and the so-called familial sensitivity (atopic, inherited, etc.) as some would have us believe, or whether all who show allergic manifestation are not born with this allergic tendency, the only difference being in the type of response

which has been shown to be similar in cases of ingestion and contact regardless of the method of entrance of the allergen.

This brings me to the consideration of the types of testing necessary in skin diseases.

In infantile eczema it is my usual routine to do passive transfer testing. This is done only after a careful history which frequently will show up the cause, or at least give some idea, so that diet trial may be used. As you will see, the trial and error method is still considered by me to be worth while when associated with a careful history and other necessary workouts. Passive transfer testing is also used in all types of widespread dermatitis where the patient has a highly reactive skin and where many sub-clinical tests would be positive and only mask or confuse the diagnosis.

Scratch or intra-dermal testing is used of course in the diagnosis of pollen, contacts, foods, occasionally in fungus such as *oidionycin*, etc. Contrary to the opinion of many that skin tests are of questionable value in the diagnosis of skin, in my experience, if they are carefully done and then correlated with the history and a careful examination, they are frequently of great help.

Patch tests are the final and no doubt the most valuable factor in determining the etiology of skin disease. Here again one must be aware of the false positive skin reactions which are had, especially in individuals with highly sensitized skins. Also one must not patch test any more than is necessary because of the possibility of sensitizing the patient. Last but not least, do not test until at least the acute stage of the eruption is over, because this may easily result in an acute exacerbation of the trouble. May I again stress the need of a careful history if the proper diagnosis is to be made. This alone will give one some idea where to look for the trouble.

In many types of allergic phenomena we are aware that although the skin tests to certain foods are negative, again a careful history will indict some foods, and upon the elimination of these we find complete relief or great improvement in the symptoms. Over emphasis of the true value of skin testing is not to be cognisant of the many pit-falls if this alone is taken as the criteria of diagnosis. Could it not be that the many elimination diets used in dermatologic therapy are but the removal of foods that time has taught are our most potent offenders and incidentally most potent sensitizers.

In closing, let me but mention the recognition of Id reaction associated with fungus infections, the vesicular eruptions on the hands occasionally associated with upper respiratory allergy, and last but not least, the part foods are playing in the vesicular chronic eruption of the hands, as was so recently pointed out by Rowe and others.

CONCLUSION

1. The need of adequate history in the treatment of allergic disease.
2. The increasing need of allergic consideration in dermatologic disease.
3. The limited values of skin tests unless they are conducted with adequate history and clinical trial.

Rowe, Albert H.: *Elimination Diet and the Patient's Allergies*, Lea and Fibiger, 1941.

Staff of Cleveland Clinic: *Allergy in Clinical Practice*, Lippincott Co., 1941.

Cooke, Robert A.: *Allergy in Theory and Practice*, W. B. Saunders, 1947.

Sulzberger, Marion: *Dermatologic Allergy*, Thomas, 1940.

Sulzberger and Bauer: *Year Book on Dermatology*, Year Book Publisher, 1947.

Student nurses often acquire tuberculosis infection as a result of exposure in the course of their training in hospitals. For them tuberculosis is an occupational disease. Physicians, nurses, orderlies, clerks, technicians and all

others who have contact with patients are all subject to the hazard, although to a varying degree. Leopold Brahdry, M. D., *Jour. Ind. Hygiene and Toxicology*, Oct., 1945.

*Some Aspects of Pediatric Allergy**

By DR. EDWARD SCOTT O'KEEFE, F. A. C. A., F. A. A. A., Lynn, Massachusetts

In the time allotted to me I intend to sketch briefly the method of handling allergic problems in office practice. There are many aspects of the subject upon which I will not touch. I wish to outline the minimum equipment and information necessary.

We have four main groups to consider, namely, eczema, asthma, hay fever, and the urticarial conditions. We will consider eczema first. In this condition a small group of allergens accounts for the majority of the cases met. This group is so small that skin tests may be omitted. Milk, egg and wheat proteins are the allergens most commonly involved. If testing is done, however, don't be misled by negative tests, for you must remember that a negative test does not eliminate a given allergen as a causative factor. The commonly used foods frequently fail to give a positive test even when the patient is allergic to them, as pointed out by the author¹ some years ago.

Owing to the unreliability of the skin tests in eczema, elimination of the foods commonly involved is the best practice. This will result in improvement in a large number of the cases encountered.

While the elimination of egg and wheat is practicable, elimination of milk presents a different problem. Milk is an absolute essential for healthy growth in infancy and childhood and therefore should not be eliminated from the diet except for a short time, 2 or 3 weeks at the most.

When milk is reduced in amount, or eliminated, soy bean preparations may be substituted, as indicated by the work of Hill.² I have used Mulsoy for this purpose. In many cases it is not necessary to eliminate milk entirely. Good results are often secured by reducing the milk ration and replacing the deficit with Mulsoy in the proportion of 25 to 50 per cent.

While attempting to alleviate an eczema by allergic means, we should not neglect external treatment. There are many external prepara-

tions used — indicating that none of them are entirely satisfactory.

I have two preparations which I use. For the milder cases I prescribe:

Acid Salicylic Gr V	
Bismuth subnitrate	½ drachm
Amyli	1 drachm
Ung. ag. rosae ad	1 ounce

The standard coal tar ointment is the most efficacious remedy, however. Its simplest form is Crude Coal tar ½ drachm, Petrolat, to one ounce.

We will now consider asthma. This is a much more difficult problem than is the case with eczema. The history is very important and often gives a clue which proves to be invaluable. Investigation of the child's environment is also essential, as is a careful investigation of the patient's diet and dietary history. The history is often of more value than the skin tests. However, neither should be neglected. Special points in the history are age of onset, seasonal occurrence, food idiosyncracies and exposure to animal emanations.

There are 5 groups in which most of the etiological factors in asthma can be placed.

- 1) Foods
- 2) Animal Emanations
- 3) Pollens
- 4) Miscellaneous factors
- 5) Bacteria

It will be helpful to remember that, generally speaking, foods are the most important factor in asthma of children under 3 years of age. In children from 3 to 7 years the animal emanations are the most important. After 7 years of age pollens assume the leading role. Bacteria become a factor, later in childhood, when we begin to get long standing infectious foci in the tonsils, bronchi and sinuses.

After evaluation of the facts elicited by the history we should proceed to the testing; this work should begin with scratch tests. A large number of tests should be made for the common foods, animal emanations and pollens with which the child may come in contact.

* Presented at the 93rd Annual Session of the Maine Medical Association at York Harbor, Maine, June, 1947.

This preliminary testing will serve two purposes: First, it will usually disclose positive tests which we can consider as suspects; second, it will disclose, with practically no danger of a general reaction, any allergen to which the child may be hypersensitive. In this way we screen out allergens which might result in a general reaction, if used intradermally.

The second step consists of making intradermal tests from the group which gave negative scratch tests. This does not require intradermal tests of the entire group, only of a selected group, which experience has shown to include the proteins most commonly involved. I will enumerate this selected group: Milk, egg, wheat, chocolate and orange, cat hair, dog hair, chicken feathers, goose feathers, house dust, orris powder, ragweed, red top, timothy, and orchard grass.

When we have arrived at this point we usually have one or more positive tests. A positive test does not mean that we have discovered the cause of the asthma. It merely means that we have a suspect. We can determine which of our suspects are guilty by eliminating them from the environment of the patient and noting the effect upon the asthma.

We are sometimes confronted by the fact that none of our tests are positive. This often means that the asthma is caused by one of the foods which I mentioned previously as causative of many of the cases of eczema, namely, milk, egg, or wheat. In asthma, as in eczema,¹ this small group of common foods frequently fails to give a positive skin test, even when it is the allergen which is causing the symptoms. Rowe's³ elimination diets will frequently be of assistance at this point.

When it has been established that the asthma is due to an animal emanation the treatment is essentially elimination of the causative factor from the child's environment. Great care must be taken to see that the parents really eliminate the cause. It is necessary to go into a good deal of detail on this subject. To give you an example: Feathers are of course a common cause of asthma in children. After suggesting that the child should be protected from exposure to this allergen, I find not infrequently that the parents will remove the feather pillow from the child's bed but leave a feather pillow on another bed in the same room. The parents will nullify

your directions in a great many ingenious ways unless you are very thorough in your investigation of the child's environment.

When pollens are the causative factor a different method of treatment is in vogue. The usual method is the pre-seasonal injection of pollen dilutions of increasing strength at weekly intervals. First, scratch tests may be made with dilutions of the pollen which we propose to use to determine how sensitive the patient is to the allergen. The scratch tests are made with 3 strengths: 1-5000, 1-1000 and 1 to 100. The method of treatment followed, with some modification, is to give 1/10 of a c.c. of the strongest dilution which shows a negative skin test. The local reaction is to be noted on the child's arm a few hours after the injection. If this reaction is no larger than a silver dollar, the dose is doubled at weekly intervals until we are using 1/2 a c.c. of a 1-50 dilution, or the highest dose the patient will tolerate, as indicated by the local reactions. We should arrive at this point just before the season starts for the particular pollen which we are using. Smaller doses may then be given at fortnightly intervals during the pollen season.

In the course of pollen treatments, a general reaction is always a possibility and often presents an alarming picture.⁴ Urbach describes the situation as follows: "The reaction is accompanied by a severe pruritus followed by a generalized urticaria, headache, general malaise, nausea and vomiting. The more severe cases will show dyspnoea, fall in blood pressure, involuntary urination and defecation and may have a fatal outcome. The incidence of general reactions is much less in children than among adults."

When confronted by a patient with a general reaction, prompt administration of adrenalin is essential in doses from 1/4 to 1/2 c.c. of a 1-1000 dilution. This may be given locally in a ring about the site of the inoculation. If the arm is the site involved a tourniquet should be applied above the point of the local reaction. Circulatory stimulants such as coramine should be given and oxygen is of value. General reactions may occur in children. They have been very rare in my experience. They will be rare in your experience if every intradermal test is preceded by a scratch test for the corresponding allergen.

We can dismiss hay fever with a few words since the diagnosis and treatment are similar to the measures outlined for pollen asthma. The two main groups are the grass cases in May and June and the ragweed cases in August and September.

Urticaria—In this condition the history is of paramount importance. The tests are of little or no value. If the history affords no information we are obliged to resort to elimination diets for our diagnosis of the causative allergen.

Drug Treatment—For asthma we have of course ephedrin, aminophyllin, phenbarbital and the iodides. The newer preparations, such as benadryl and pyribenzamine have been used with encouraging results. The most striking effects have occurred in urticaria, and hay fever. The pruritus of eczema is at times alleviated by these drugs. Benadryl has not been of value in asthma; pyribenzamine has been reported as more effective. Neither opium or morphine nor any of their derivatives should be used in asthma.

I have outlined briefly the treatment of the common allergic conditions. There is nothing here which cannot be managed by the general practitioner. How about equipment and material? It is not expensive nor is it difficult to obtain. What should we have on hand in order to efficiently manage our allergic cases?

First, we should have a fairly large group of the powdered allergens, including the common foods, the common animal emanations, the common pollens and a miscellaneous group, including orris powder, house dust, etc.

Second, we should have a much smaller group of allergens for intradermal testing. This should include solutions of cat hair, dog hair, chicken feathers, goose feathers, orris powder, house dust, egg, milk, wheat, orange and chocolate, as well as the common pollens, such as ragweed, timothy, red top and orchard grass. The most satisfactory strength for the intradermal pollen solutions, by the way, is a 1-1000 dilution.

Third, we should have dilutions of the pollens for treatment. This should include dilutions of 1-5000, 1-1000, 1-100 and 1-50.

Fourth, we require surgical needles and a supply of N/10 Sod. hydroxide or normal salt

solution for use in the scratch test. We should have also a dozen or more graduated syringes and an equal number of 26 gauge needles for intradermal testing.

In regard to the materials used for testing I wish to say that reliable material for the scratch test is put on the market by many of the commercial houses. However, the solutions for intradermal testing are far from satisfactory. Of course the danger of a general allergic reaction is much greater following an intradermal test than is the case with the scratch test. Apparently this explains the reluctance of most of the manufacturers to distribute an intradermal solution of adequate potency. You will secure much better results if your intradermal solutions are obtained from some of the leading allergy clinics. Now to consider methods of testing:

The scratch test is very simple. The site selected is usually the outer surface of the upper arm, although the inner surface of the forearm is usually more convenient in children. The skin of the back may be used and has the advantage that the patient can't see what you are doing and so is less apprehensive.

A row of drops of the solvent are placed on the skin 1 to 2 inches apart. The allergen is then mixed with the solvent and a short superficial scratch is made through this material with a sharp, sterile, surgical needle. Positive results, when obtained, appear within 15 to 20 minutes, and consist of areas of redness about the scratch. Any area larger in diameter than a ten cent piece is considered positive. A control scratch should be made always in order to determine the responsiveness of the skin to trauma. The intradermal test is done in the same manner as the Schick test. Enough solution is injected intradermally to produce a very small wheal. A positive result produces an erythema similar to that occurring in the scratch test. While whealing may occur in either of these tests it is not a necessary criterion of a positive test in children.

I have outlined the methods and enumerated the materials necessary to give first aid to the allergic child. The public is interested and informed upon the general aspects of allergy. I feel that the profession should take a greater

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Clinical Pathological Exercise

Medical Case Presented at the Eastern Maine General Hospital

DR. GEORGE ROBERTSON, presiding

Edited by JOSEPH E. PORTER, M. D.

A 51-year-old married truck driver entered the hospital complaining of a complicated series of episodes. About six months before admission he began to have "spells" which occurred twice a week initiated by a "pulling-down sensation" in the stomach. After the onset of these spells he would get very faint. About three months before admission he began to have spells characterized by dizziness, vertigo and "blacking out." These recurred about every two weeks and would last about fifteen or twenty minutes. Independently of these spells the patient had episodes of diplopia without strabismus. These spells have become more and more frequent until they recurred every few days.

About two weeks before admission there was a distinct change in his symptoms. He suddenly developed malaise, chilly sensations and fever. He began to have headache and pain in the ear with periods of deafness, chiefly in the left ear. His dizzy spells continued. These caused him to fall to the left. For the past two weeks he has also had a left hemiparesis and numbness of the left side of the body, especially over the left side of the face. Ten days before admission his speech became thick and slurred. Now he cannot see out of his right eye. There has been no dysphagia. His dietary intake appears to have been adequate.

His blood pressure has always been high (between 160-220). Four months ago he had albuminuria, but this cleared up. He has had nocturia about four times nightly. There has been some recent emotional upset with the death of his two sons.

Physical examination reveals an apathetic, rational man apparently oriented in all spheres. He shows marked emotional instability appearing to laugh and cry without due cause. His speech is thick and slurred. The pupils are round, regular and equal and react normally to light and accommodation. There is a marked coarse nystagmus with the fast component on

the side to which he looks. There is vertical nystagmus on upward gaze. The fundi show normal nerve heads with slight A-V compression, widened central light band and slight tortuosity of the arteries. Auditory acuity appears normal. There is slight thickening of the left drum and slight retraction bilaterally. The tongue is beefy red and protrudes in the midline. There is a moderate cheilosis. The blood pressure is 180/115. The heart appears essentially normal with a snapping second sound.

Other cranial nerves appear intact although the nurse reported that he had some difficulty in swallowing food. The abdominal reflexes are absent. The cremasterics are weak bilaterally. The tendon reflexes are equal and appear slightly exaggerated throughout. There is no clonus. Stimulation of the sole of the foot produces a withdrawal response. Hoffman's sign is negative. There is a two-plus dysdiadokokinesia. There is no impairment of position or vibratory sense. There is a diminished appreciation of pin-prick on the left especially on the face. There is a definite left hemiparesis.

Laboratory Findings:

Blood Hb., 15gms; R. B. C. 4,650,000; W. B. C. 6,700; Neutrophils 63%; Bands 1%; Eosinophils 2%; Lymphocytes 32%; Monocytes 2%.

Urine: Amber, slightly cloudy, acid, 1.026, albumin negative; sugar 0.4%; acetone negative; diacetic acid negative. A few leucocytes and a few cylindroids are found in the sediment.

Blood: Sugar 85mgm/100cc; Non-Protein Nitrogen 44mgm/100cc.

Blood: Kahn and Hinton negative.

Spinal Fluid: Initial pressure 120mm water; fluid clear. One cell per cu.mm; total protein 33mgm/100cc. Colloidal gold curve: No reduction. Spinal fluid Wasserman reaction negative.

Course in Hospital: The patient's course in the hospital was progressively down-hill. The patient became comatose and expired eleven days after admission.

DISCUSSION

Dr. John S. Houlihan: This is obviously a case of central nervous system disease, characterized by a series of episodes. It is difficult to explain the "pulling down sensation" in the stomach followed by a feeling of faintness. The recurrent spells of dizziness, vertigo and blacking out are more suggestive of an organic disease process and suggest a lesion in the semi-circular canals, the vestibular component of the eighth nerve, the vestibular nuclei, the vestibulo-cerebellar tracts or the cerebellum itself. The fact that these attacks were recurrent and lasted only fifteen or twenty minutes suggest that the damage at this time was relatively mild and not a massive destructive lesion. Independently of those attacks the patient had episodes of diplopia without strabismus. These have also been recurrent with increasing frequency and suggest a weakness of the oculomotor muscles without a complete paralysis. There should be a strabismus.

Dr. Richard Wadsworth: There is a note in the record that diplopia could be demonstrated only when the patient looked to the extreme left.

Dr. Houlihan: This suggests a weakness of the left external rectus muscle with a possible lesion in the left abducens nucleus. About two weeks before admission he had malaise, chilly sensations and fever associated with headache, pain in the ear and periods of deafness in the left ear. This sound like an acute inflammatory process. Did he have any fever while he was in the hospital?

Dr. Wadsworth: His temperature while in the hospital did not go above 99°F until the day before his death. However, there was a note that his physician noted an acutely red drum at the time the patient had his malaise, chilly sensations and fever. When he arrived at the hospital the drum was thickened and retracted.

Dr. Houlihan: This would indicate that the patient had an acute otitis media at this time, but this was some time after the onset of his

nervous symptoms and is probably not related to the series of episodes which led to his death. At any rate his dizzy spells continued and caused him to fall to the left. This suggests a unilateral lesion in the left vestibular nucleus or in the left side of the cerebellum. For two weeks prior to admission he also had a left hemiparesis and numbness of the left side of the body especially over the left side of the face. Here we have evidence of involvement of another system of fibers. The hemiparesis suggests involvement of the pyramidal tract. Furthermore, the lesion should be on the right to produce a left hemiparesis. The finding up to this point have suggested pathology on the left. The numbness on the left side of the face and left side of the body suggest involvement of the trigeminal tract and apparently to a less extent the fibers of the medial lemniscus.

Ten days before admission the patient's speech became thick and slurred. This is difficult to interpret. This might be produced by a lesion of the cerebellum or it might be the result of a lesion in the pyramidal tract.

The question of dysphagia is hard to evaluate. In the history it says there has been no dysphagia but later says the patient had difficulty in swallowing his food.

Dr. Wadsworth: The first statement was history obtained from the patient. The latter was an observation of a nurse who watched the patient while he was in the hospital.

Dr. Houlihan: It would seem, then, that the patient developed a dysphagia suggesting the possibility of involvement of the vagus nuclei. It is hard to explain his inability to see out of his right eye.

Dr. Wadsworth: Here again there seems to be a discrepancy. Upon admission the patient said that he was unable to see out of his right eye. Later the consultant felt that there was good sight in this eye.

Dr. Robertson: Was there an examination of the visual fields?

Dr. Wadsworth: There is a note in the chart suggesting that the visual fields be examined, but there is no record that this was done.

Dr. Robertson: Do you think that we can assume, then, that the patient was unable to see to the right rather than having loss of vision in the right eye?

Dr. Wadsworth: With no record of visual field examination, I believe we are not justified in assuming there was a visual field defect.

Dr. Houlihan: Perhaps we can omit the question of blindness. The physical examination gives us positive findings which are pretty well limited to the nervous system. The patient appears rational and oriented in all spheres. This suggests that the cerebral damage is not too wide spread. The emotional instability does not help me to localize the lesion. The coarse nystagmus which is bilateral suggests a lesion either of the vestibular nuclei or of the cerebellum. The history of deafness suggests that the left cochlear nerve is involved. The absent abdominal reflexes and weak cremasteric reflexes are not diagnostic. The lack of a Babinski response to planter stimulation is somewhat disturbing. One would expect a positive Babinski sign to go with the left hemiparesis.

Dr. Robertson: It is not always present in lesions of the pyramidal tract. When it is present it is confirmatory evidence.

Dr. Houlihan: Dysdiadokokinesia is evidence of cerebellar involvement. To sum up the localization of the lesion: we appear to have involvement of the left cerebellar hemisphere, involvement of the left fifth, sixth, eighth cranial nerves, probable involvement of the tenth nerve and pyramidal tract involvement which appears to be on the right. What evidence is there to suggest the cause of this lesion? The history suggests that the lesion has been progressive over a period of six months. The patient is a known hypertensive but shows relatively few eye-ground changes. He was said to have had transient albuminuria and glycosuria of 0.4%, but the blood sugar was normal. The blood counts were non-contributory. The blood and spinal fluid serology were negative. There were no abnormal findings in the spinal fluid. There is relatively little to aid in a positive manner. There is nothing to suggest intracerebral hemorrhage or abscess. His age is about that in which one would expect to find multiple sclerosis. The two most likely pathologic processes are vascular disease and tumor. Of these I would prefer to think of tumor as the cause. The location appears to be in the left cerebello-pontine angle. One should consider the possibility of an acoustic neuroma or a glioma.

Dr. Herbert Clough: Was the blood sugar obtained at the same time that glycosuria was observed?

Dr. Wadsworth: There is only one urine report in the chart. This showed 0.4% glucose. Two days later a blood sugar was performed apparently to aid in explaining the glycosuria.

Dr. Clough: Then we cannot evaluate the glycosuria.

Dr. Wadsworth: It is not an uncommon finding in severe brain injury.

Dr. Wilfred J. Comeau: Where is the seat of emotional instability?

Dr. Wadsworth: There is no known definite localized lesion which produces emotional instability. This phenomenon is usually seen in wide spread lesions, particularly those associated with dementia. The lesions may be cortical, subcortical or brain stem, or a mixture of those.

Dr. Robertson: What other pathologic process should be considered?

Physician: With the history long-standing hypertension I believe that we should consider hypertensive encephalopathy.

Dr. Robertson: Is it necessary to have retinal lesions in every case of hypertensive encephalopathy?

Dr. Wadsworth: Retinal lesions are not obligatory but are usually seen in hypertensive encephalopathy.

Dr. Robertson: It is my feeling that they are always found. One should be able to demonstrate at least grade III retinal changes in order to establish the diagnosis of hypertensive encephalopathy. Is there any syndrome simulating this picture which we should consider as a possibility?

Dr. Lyman Warren: Von Hippel's disease.

Physician: What is that?

Dr. Wadsworth: A hemangioblastoma of the cerebellum. They are usually cystic tumors with a long clinical course. One would expect the signs to be pretty much limited to the cerebellum unless there were evidence of increased intracranial pressure. It would be hard to explain the hemiparesis, sixth nerve weakness and sensory changes seen in this case.

Dr. Robertson: What ophthalmoscopic findings might you expect to find in Von Hippel's disease?

Dr. Warren: A hemangioma of the retina.

Dr. Clough: I suppose that one should mention lues as a possible etiologic factor, just to rule it out.

Dr. Robertson: The negative blood and spinal fluid serology appear to rule it out.

The syndrome of pseudo-bulbar palsy should be mentioned. This occurs in individuals who have repeated vascular insults usually with hemiparesis or hemiplegia. They are apt to have dysarthria, dysphagia, explosive speech and emotional outbursts. The pathology consists of widely scattered vascular lesions.

Dr. Wadsworth: When the question was previously asked regarding the center of emotional instability I purposely avoided mentioning pseudo-bulbar palsy hoping that someone else would suggest it as a possible diagnosis here. It is one of the more common conditions in which we see uncontrollable laughter or crying from apparently inadequate stimuli.

Dr. Comeau: Is pseudo-bulbar palsy on the basis of hypertension or of arteriosclerosis?

Dr. Wadsworth: The lesions are usually multiple thrombi in arteriosclerotic vessels with bilateral distribution usually involving the region of the internal capsules.

Dr. Robertson: There is usually a progressive process with dementia. The speech of these patients is usually quite characteristic. They sound as if they have a hot potato in their mouth.

Dr. Clough: Can we rule out the possibility of brain abscess in this case?

Dr. Houlihan: The low white count, the absence of fever and the lack of cellular response in the spinal fluid are against brain abscess.

Dr. Joseph Lezberg: Is there anything about the nystagmus to help us localize the lesion?

Dr. Wadsworth: There are several aspects which might be mentioned. The nystagmus appears bilateral and there is both horizontal and vertical nystagmus. Horizontal nystagmus can be produced by lesions in the labyrinth, vestibular nuclei or in the cerebellum. However, vertical nystagmus is not produced by cerebellar lesions. This is one more piece of evidence to suggest a lesion in the brain stem.

Dr. Robertson: Homolateral hemiparesis is sometimes seen in cerebellar lesions. Most of the signs and symptoms can be explained on

the basis of a lesion in the cerebellum. It seems to me that we can almost exclude the possibility of acoustic neuroma in this case. The duration of the history is too brief. The deafness is not progressive. There is no history of tinnitus. There is no evidence of increased intracranial pressure. Above all there is no increase in the total protein of the spinal fluid. It seems to me that we are dealing primarily with a vascular lesion either of the pseudo-bulbar palsy type or of thrombosis of the posterior inferior cerebellar artery.

Dr. Houlihan's Diagnosis:

Left cerebello-pontine angle tumor.

? of glioma in region of cerebello-pontine angle.

Other Diagnoses:

Pseudo-bulbar palsy.

Thrombosis of left posterior inferior cerebellar artery.

Hemangio blastoma of cerebellum.

Post-Mortem Diagnosis (Dr. R. S. Wadsworth):

Cerebral arteriosclerosis with multiple thrombi and multiple areas of softening. Malacia of left cerebellar hemisphere.

Discussion (Dr. Wadsworth): All of the major vessels in the circle of Willis showed marked diminution in the caliber of the lumina. This was especially true of the left posterior inferior cerebellar artery. Many of the small vessels in the pons and cerebellum showed complete thrombosis. Vascular lesions were observed from the medulla to the cortex. The vessels were unusually sclerotic for a man of 51 years. The most marked destruction of tissue was in the pons and in the left cerebellar hemisphere. Both of these structures were so soft that they fell apart while the brain was being removed. The histologic appearance suggests a slowly progressive lesion. There is very little phagocytic activity. There is considerable gliosis with large swollen astrocytes. There are numerous scattered foci of demyelination and numerous large vacuolated areas. In one portion of the pons are several microscopic abscesses which were probably the result of the otitis media. There may have been a septicemia at that time with organisms settling out in a region of decreased resistance. No thrombophlebitis was demonstrated.

The President's Page

The adopted program of the American Medical Association is the development of voluntary health insurance as opposed to compulsory sickness insurance. It recognizes the need of supplying the Professional and Administrative leadership at the local level necessary to furnish public health services, and adequate medical care, to the people of the nation.

It is perfectly possible that if it had not been for the Murray-Wagner-Dingell bill, that American Medicine would have gone along without any radical change. Until we were informed by the advocates of this bill, that many people throughout the United States were suffering from lack of Medical care, we had been boasting that we had the best system of Medicine in the World for everyone. We undoubtedly have sidetracked this bill, but we also know that Congress intends to pass some health measure. Your National Society has adopted the Policy of Voluntary Health Insurance.

At our last legislature, after much deliberation in your House of Delegates and your Council, we present a bill—asking for an enabling act to have our own prepayment insurance, if we so wish. The bill is killed before the legislative committee, with members of our State Society appearing in opposition. We will forget about the merits of the bill. Here is what I am trying to get across. You have appointed the best men in your society on a committee to study Prepayment Insurance. You have instructed them to present an act to your legislative committee, who in turn pay your good money to a legislator, to put over this bill. Lo and behold members of your own society, without instruction, appear before the Committee in opposition to the bill.

Now I am willing to admit that I call them wrong, but I am willing to be shown, and also willing to change my mind. Your delegates and officers spend hours in arguing policies for the Association. If we are to be a going organization their decisions must be final. We are the only State in New England that does not have some form of Prepayment Insurance.

The other New England States have completed arrangements with each other for licensure by endorsement. We are badly in need of M. D.'s in this State. Those desiring to come fight shy of the Medical examination.

For the good of the State of Maine, we should have a Joint Board of Examiners for Medical licensure. The Osteopath lobby is so strong, I feel that it would be impossible to put this into the law. However, I think the time is ripe, at the next legislature to put up a Basic Science law. I believe that the time has come that Osteopaths and Chiropractors for their own protection, will submit to this. However, it is a ticklish problem, and one that should be well organized before it is attempted. The American Association of Basic Science Boards are now working on a uniform law that should be acceptable to all States. You must remember however, that it is the individual State that accepts or rejects, because Congress cannot enact such a law.

Probably our greatest drawback for a progressive Health problem in the State is taxes or money. I sometimes wish that the Democratic party was a little stronger in the State so we could have a little bartering: good things promised if either side wins. For example, Connecticut through its sales taxes this last year was given a million dollars for the rehabilitation of its aged. In our State, the finances to our health department are lowered, our aged have their pensions cut in half, and our solons tell us, although they are in favor of our Health measures, that the State just has not the money to finance these things.

Gentlemen—I have offered for your consideration:

1. Prepayment Insurance.
2. A change in our Medical licensure.
3. A Basic Science Law.
4. A slight illusion to State Politics.

"It has been said that we do not need a change." Maybe we do not. However, I am afraid that if we don't make the changes, somebody else will.

STEPHEN A. COBB, M. D.,
President, Maine Medical Association.

Editorial

Tuberculosis Research the Key to Eradication

The Maine Public Health Association reports that The Committee on Medical Research of the National Tuberculosis Association has already approved Grants of money for Tuberculosis Research for 21 investigators for 1948.

Dr. Esmond Long, Director of the Phipps Institute in Philadelphia and Director of the National Tuberculosis Association's Research Program, explains to the State Tuberculosis Associations that these Grants will be made to approved laboratories, hospitals and universities through the country. Research Programs are being done under NTA Grants to determine the value of streptomycin in treating Tuberculosis, as well as continuing to carry on other research programs concerned with etiology, pathology, and other scientific phases of Tuberculosis.

Grants approved for 1948 are for the purpose of conducting studies on the course of Tuberculosis in children, minimal lesions among nurses, and on Pregnancy and Tuberculosis. Many more Grants are being provided to study the chemistry of the tubercle bacillus, the factor causing virulence of the tuberculosis organism, and changes taking place in the blood during Tuberculosis. These Grants involve the spending of large sums of money.

According to last report issued by the NTA nearly \$65,000 was spent during the last fiscal year for this purpose. Christmas Seals furnished the funds for these Grants of money, which have been made for nearly 25 years, thus providing the means for research in Tuberculosis which we all hope will lead finally to eventual eradication of the disease. This past year many State Associations have also contributed sums for research to the National

Fund, from Seal Sale returns, thus swelling the amount set aside for this purpose.

Besides research the 3,000 Tuberculosis Associations, affiliated with the NTA, have made during this time a noteworthy contribution to health education of the general public. They have conducted demonstrations to prove the fallacy or truth of certain approaches to public health. They have, through their Rehabilitation Program for the Tuberculous, built the morale of the patient and helped him to find his place in community life, prepared by especial training to earn a living for himself and his family.

The Maine Public Health Association now conducting its 41st Annual Sale of Tuberculosis Seals, is looking to the people of Maine to continue their support of its program. We feel sure that all will purchase as many of the Seals as they can. The National Tuberculosis Association Research Program not only is dependent upon this campaign, but the Rehabilitation In-Service Program at Central Maine Sanatorium started last year, the budget for eighteen affiliated county and local associations, and special services to individual patients are all paid for by voluntary contributions of the people.

Grants by the Maine Public Health Association this year also include, provision of two scholarships for physicians for refresher courses in Chest Diseases to be given under the auspices of the American Trudeau Society early in 1948 in or near Boston Medical Schools, as well as a six weeks' scholarship at Trudeau School of Tuberculosis at Saranac Lake. As Dr. William Osler once said: "The battle against Tuberculosis is not a doctor's affair, it belongs to the entire public."

From the Executive Secretary's Office

Figures Don't Lie, But—

Some of you may have read a thing I wrote for the December JOURNAL about the Murray Bill. At that time I threatened that another effusion would follow setting out some of the arguments for the bill and stating some of the conditions that give such a bill any chance of becoming law. This will lead, of course, to a third article to explain what the American Medical Association urges by way of remedies for those conditions.

I'd like to start with one argument, not for the bill, but against it. The National Physicians Committee, that's your legislative shock-troops against the Murray Bill, says that the bill is Communistic; Communistic in purpose to bring medicine under the control of the state; Communistic in inspiration—Lenin said, "Socialized medicine is the keystone of the Communist State;" Communistic in its ardent supporters. If these things are true then the course to combat is direct attack.

But let us look at the arguments and reasons for the strength of such a measure. One of the most alarming statements was contained in a Senate Committee print from a memorandum prepared by the Bureau of Research and Statistics of the Social Security Board. This statement was picked up by newspapers and reprinted, and articles were prepared from it and published in magazines. Speaking of the results of selective service examinations, the statement said, "Of 16,000,000 youths examined, fully half were unfit for military service. The nature of the defects among the rejectees suggests that half to two-thirds of the defects could have been prevented or rehabilitated with timely care." Dr. Maurice H. Friedman, however, went over the statistics carefully and came out with an entirely different conclusion. He says that from December, 1941, to December, 1943, 10,000,000 men were examined and 3.6 million rejected. That is a 36% rejection. But during that period 2.7 million men enlisted and were accepted so that the number sampled should be 12.7 million and the rejection rate would then drop to 28.4%. After these enlistments, 37.5%

of the remaining men were deferred because of essential occupation; another large group of men at least physically fit for industry. After exhaustive study of those rejected and the causes, Dr. Friedman concludes that if every rejectee had gone to the doctor immediately upon becoming impaired and if the doctor had recommended corrective measures, and if the patient had accepted that recommendation and if the corrective procedures had been 100% effective, then medical care could have influenced the condition of about 20% of the rejectees. At that point the argument that more medical care for all the people would have prevented the greater part of the 50% rejections alleged by the Senate reprint statement seems to fall apart. No amount of medical care would have made the illiterate, the diabetics, the morons, nor the amputees, acceptable.

The lack of adequate medical care in rural communities is a thorny and difficult problem. It is not sufficient to say that if the rural community does not have the purchasing power to support a doctor, he shouldn't be expected to settle there. The proponents of compulsory insurance will answer gleefully that their plan will furnish the necessary purchasing power for medical services. It is a well-known fact that if a young doctor does settle in a rural community, his fellow townsmen will drive right past his office to some nearby larger center to see a doctor and the country doctor will get only the emergency cases and night work. Notwithstanding, the problem should be studied and a solution evolved.

There are good, self-respecting people who earn their own living and pay their ordinary bills, but when a catastrophic illness strikes, particularly if it strikes the wage-earner of the family, there is a financial burden that may blight the life of that family for a long time to come.

There is another lower income group which you call the medically indigent. These people have just barely enough income to buy food,

clothing and shelter. They have no reserves to pay a doctor even for a minor illness.

These conditions furnish the ammunition to argue for a system that will give everyone medical care under government supervision. The argument is for medical care quantitatively. For most years of its existence organized medicine has been concerned with the quality of that care and organized medicine has raised that quality to the highest plane. Now, organized medicine has turned its attention to the avail-

ability of care, the quantitative factor. Its proposal is to make this high quality medical service available to everyone within the framework of our democratic system of free enterprise. Some of the plans to meet this situation, some of the solutions suggested by other state societies, or by the American Medical Association, are worthy of your consideration and study.

W. MAYO PAYSON,
Executive Secretary.

No Fee Schedule in Industrial Accident Cases

At the House of Delegates' meeting last June the matter of doctors' fees in industrial accident cases was brought up. Some of the doctors were apparently under the impression that the Industrial Accident Commission had a fixed schedule of fees for the different procedures. This is not true in this State.

According to information obtained from the Commission, the question of fees is seldom brought before them, although the Commissioners are the judges of what is a fair charge for the service rendered. When raised, the

question of fees is more often concerned with the number of visits or the number of treatments necessary and useful than the charge made for each.

In general, it is safe to say that, while the Commission has no schedule of fees of its own, its decision in case of a dispute would be based upon the fees usually charged by doctors in that locality for the particular procedure involved.

W. MAYO PAYSON,
Executive Secretary.

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition. Constitution of the World Health Organization.

There is no doubt that the most important of all case-finding agencies in the fight against tuberculosis are its practicing physicians. It is almost always true that the family physician has the first opportunity not only to ascertain the presence of tuberculosis among the people, but

also to give battle for the cure of the afflicted and to safeguard the other members of the family from the tubercle bacillus. For it is the family physician to whom most people go when troubled by signs of ill health.

The records in the chest diagnosis clinics prove that the physicians, if they are determined to do so, can perform a better job of suspecting and discovering active tuberculosis cases, year in and year out, than any other agency. Report of Comm. on Tbc., N. H. Med. Soc., *N. E. Jour. Med.*, Sept. 26, 1946.

The Private Practice of Medicine *vs.* *Socialized or Federal Control*

FREDERICK E. WHEET, M. D., Westbrook, Maine

There seems to be a determined and well organized attack on the American System of the Private Practice of Medicine. This attack emphasizes the inadequate medical care available in many cases of real need. Much is made of the difficulty experienced in sparsely settled areas of obtaining medical service and the high cost of such service when obtained. The contention is made that medical service is not available to all people all the time and that this lack could be corrected by a system of federal control. This attack is practically an indictment of the system of private medical practice. What does it mean to the health and welfare of our people?

The American Medical Association was organized in 1847, one hundred years ago. Previous to that time there had been no professional standards and no generally recognized medical ethics. This organization established ideals and promoted research. The cause and nature of disease had not been understood and treatment had relied largely on blood letting, nostrums and superstition. The contrast between the practice of medicine of those days and the present is so great that it challenges the imagination and presents one of the greatest marvels of modern times. When I graduated from medical college in 1892, the A. M. A. was forty-five years old. Scientific research had produced important results. The germ theory was one of the first to intensify the search for the cause of disease. Surgeons discovered that "laudable pus" did not always follow an operation when hands were washed and towels and instruments thoroughly cleansed previous to the operation. Infectious diseases as well as the healing of surgical wounds, were brought under control by the recognition and acceptance of the value of asepsis and antisepsis. No period in the history of medicine and surgery has witnessed such marvelous achievements as during the fifty-five years that I have been engaged in the private practice of medicine, and the best

medical service in the world has been made available to all the people whether able to pay or not. Anaesthesia general and local, almost perfect surgical technique, improved diagnostic skill, antitoxins for diphtheria and other epidemic diseases, the X-ray, control of tuberculosis, typhoid and yellow fevers, the importance of sanitation and the use of drugs in the fight against disease, are only a few of the many discoveries of vital importance to the health and welfare of the people. Medical service has become very efficient and readily available, relieving suffering and adding many years to life's expectancy. These discoveries are of world-wide application and have been brought about by intensive research promoted by the A. M. A., made up of men engaged in the PRIVATE PRACTICE OF MEDICINE, without federal aid or supervision of any kind.

A plan has been proposed to provide under federal supervision, medical and surgical care whenever and wherever needed regardless of location or ability to pay. Under this plan such services would be furnished at no cost to the patient. Compensation for the physician, surgeon, nurse, dentist, or hospital involved would be arranged for according to the type of service rendered. Money necessary to meet the expense would be provided by a system of taxation to which the entire population would be subjected. The surgeon-general of the United States would have the responsibility of administration and fixing the salaries to be paid. The entire country would be divided into districts with doctors, nurses and other attendants allocated in proper number to assure adequate medical care to every inhabitant of the district. First aid would be immediately available with hospital and ambulance service as required. The plan is very attractive and has a strong appeal. Surgeon-General Parran states that "There is a substantial part of our population which does not receive adequate medical care." Actually less than 2%. The plan proposed

seems to offer a solution to this problem, but its application presents so many difficulties, and the implications are so varied that it seems perfectly proper to offer some points to be clarified. The amount of money required to finance the plan and provide for its continuous operation would necessitate a high rate of per-capita on those able to pay. The collection of the tax would be complicated by the large number of exemptions to be considered. Exemptions would have to be granted to those concerned in the administration of the plan, also doctors, nurses and other health agents, the unemployed, disabled, mental defectives, old age dependents and others. This in itself would call for a large staff of non-medical clerks. The paper work would be a full time job and draw heavily on the funds. The rules and regulations would be made by non-medical officials, decisions made and judgments enforced by an army of inspectors. This provides an excellent opportunity for fraud. An expert accountant employed by the government during the war, asserts that for every dollar applied to welfare, two were required to watch it. As yet no method has been suggested as to how to obtain an adequate supply of practitioners. The surgeon-general declares "there are not enough physicians, dentists, nurses and other health personnel." Regular graduates of grade "A" medical schools will not take kindly to the type of regimentation involved in federal control of their services, and there is a reasonable doubt if young men and women of high caliber would be interested under such restrictions. Federal control would undoubtedly stifle personal initiative and discourage the kind of research which characterizes free medicine. With doctors under control there will be the temptation to obtain under cover fees not provided for in

the regulations. Opposition to the plan will come from those who employ osteopaths, chiropractors, Christian scientists and faith cures, and there are many who will neglect and even refuse to avail themselves of medical aid even when close at hand. Some prefer to employ irregulars and will demand the right to use the practitioner of their choice. They will make the charge of discrimination if denied the kind of medical care they insist on having and object to paying taxes for the support of a system they do not approve. It is their money that is being used and they will insist on claiming the kind of benefits they desire.

Those unable to pay are well provided for under the present system through agencies already established. Federal supervision will require a radical change in the management of our free clinics, Red Cross, old age assistance, mothers' aid, group insurance, community chest and other organized welfare groups. It is all very confusing, and the complications actual and possible will require an unusual type of administrative ability.

Considering the results and marvelous benefits to the human race of scientific research, fostered and encouraged by the AMERICAN SYSTEM OF PRIVATE PRACTICE OF MEDICINE, free from federal control, it seems that the indictment referred to at the beginning of this paper is not justified. We have the best knowledge of the uses of drugs, and the nearest to perfect surgical technique of any people in the world. No system can be one hundred per cent perfect, and the inadequate medical care complained of is based on exceptional cases. Federal supervision cannot possibly provide a more completely satisfactory medical service than we now have.

Some Aspects of Pediatric Allergy—Continued from page 5

interest in this problem, and be prepared to cope with it. Many communities in this state are isolated. Consequently if the local physicians do not treat the allergic patient, the case is just not treated.

All of us should handle the simpler problems in allergy. If the case is obstinate, or obscure,

recourse can be had to any of the excellent allergists right here in Maine.

- (1) O'Keefe, E. S.: Protein Sensitivity in Children, with Negative Cutaneous Reactions. *J. A. M. A.*, 80:1120, Apr. 21, 1923.
- (2) Hill, L. W.: Brennemann, Practice of Pediatric IV: 43:30.
- (3) Rowe, A. H.: *J. A. M. A.*, 9:1623, 1928.
- (4) Urbach, E.: *Allergy*, Grune & Stratton, 1943.

Necrologies

Thomas J. Croteau, M. D., 1880-1947

Thomas J. Croteau, M. D., 67, of Chisholm, Maine, died in a Lewiston hospital, December 14, 1947, after a long illness.

Dr. Croteau was born in Ste. Julia, Quebec, June 1, 1880, the son of Thomas and Cesarie Lambert Croteau. He attended medical schools in Paris and in Palestine, and received his medical degree from the University of Montreal in 1907.

He practiced in Lewiston from 1907 to 1910, and then located in Chisholm.

He was a member of the Franklin County Medical Society, the Maine Medical Association, and the American Medical Association.

He is survived by his widow and nine children.

Henry L. Johnson, M. D., 1886-1947

Henry L. Johnson, M. D., 61, Bowdoin College physician the past 20 years, died in his home in Brunswick, Maine, December 3, 1947.

Dr. Johnson was born in Wiscasset, February 16, 1886, the son of Francis C. and Emma T. Lincoln Johnson.

He was graduated from Bowdoin College in 1907, entered the Bowdoin Medical School and in 1912 was graduated from the College of Physicians and Surgeons at Columbia University. He was a surgical interne at Rhode Island Hospital, Providence Lying-In Hospital, and Bellevue Hospital, New York City. He

practiced in Westerly, Rhode Island, from 1912 through 1927, with the exception of two years overseas during World War One with the Rhode Island medical unit. Following a period at the Boston Psychopathic Hospital he was appointed college physician at Bowdoin in 1927.

Dr. Johnson was a member of the Rhode Island Medical Association, the American Association of Physicians and Surgeons, and the American Medical Association.

Surviving are his widow and three children.

James W. Laughlin, M. D., 1871-1947

James W. Laughlin, M. D., 76, former health inspector for the State Department of Health in Sagadahoc, Lincoln, Knox and Waldo Counties, died in his home in Newcastle, Maine, December 22, 1947.

He was born in Brooklyn, New York, September 6, 1871, the son of William and Mary J. Laughlin. He attended public schools in Brooklyn, and received his medical degree from Bowdoin Medical School in 1900.

Dr. Laughlin, who had resided in Newcastle since 1914, was a member of the Lincoln-Sagadahoc County Medical Society, the Maine Medical Association and the American Medical Association. During World War One he served as Chief of Medical Service at a U. S. Army Base Hospital in France.

He is survived by his widow, Mrs. Maude Rairden Laughlin.

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President, Oscar W. Perrault, M. D., Biddeford

Secretary, C. W. Kinghorn, M. D., Kittery

County Society Notes*100% Paid Membership for 1948***Piscataquis County Medical Society****Cumberland**

A meeting of the Cumberland County Medical Society was called to order by President Edward A. Greco at 8.00 P. M., November 28, 1947, preceded by a dinner at the Falmouth Hotel. Following the reading of the minutes of the last meeting, there were several letters read, including a request by the U. S. Marine Corps for a doctor who will serve as part-time physician in the Naval Reserve, with rank of Lieutenant J. G.

A letter from the Western District of the Maine State Nursing Association was also read, in which a request was made for the society to name three members to the Governing Board of the Nurses' Central Professional Registry, of which one will be chosen by the Registry, to serve for a 3-year term, beginning January 1, 1948.

Dr. E. E. O'Donnell, Chairman of the committee to confer with the representatives of the Nurses' Central Professional Registry, commented on the fact that this registry has much to recommend it; still it offers very many problems between the relationships of the nurse, doctor, and patient. His report was accepted.

Dr. Henry B. Finks, who is the representative from this society to the Health Division of the Council of Social Agencies, reported that at the meeting last Wednesday a report was read by Dr. Richard S. Hawkes. Many of those present at this meeting felt that the committee appointed by the City Manager, Mr. Moore, in order to study the Problem of health needs in the community, should have had some representation from the other agencies, particularly with reference to the various nursing agencies in the city.

The applications for membership of Dr. George Loewenstein, Dr. Arnold W. Moore, and Dr. S. Frank Fox, were all acted upon, and they were unanimously elected to membership in this society.

Dr. James Patterson cited the lack of a place for the care of tuberculosis cases, patients with psychiatric problems, and for the care of the aged with chronic diseases. A lively discussion followed and it seemed to be the consensus of opinion of those present that there is a need for some sort of a hospital to take care of such cases. Dr. Finks pointed out that the City Hospital would care for cases of this sort, providing the patient is a resident of Portland. Several of the members emphasized the difficulty in getting any sort of patient into the City Hospital. Dr. Finks emphasized the reason why non-residents of Portland are unable to get into this hospital, which is chiefly due to the fact that neither they or their communities will take the financial responsibility for them. The discussion then switched from the need of a new hospital of the county type to take care of these cases, to an investigation of facilities already existent, with particular respect to

improving the facilities in the hospitals already in existence, with a view of taking care of problems of this sort. As a result of this discussion, a motion which was originally made by Dr. Patterson, recommending that this society go on record as favoring a county hospital, was withdrawn by him, and instead Dr. Max E. Witte moved that a committee be appointed to confer with the various hospitals in this area to determine what sort of recognition they can give to this problem. The society voted unanimously that such a committee be appointed by the President.

The speaker of the evening was Dr. David Bosworth of New York City, Visiting Professor of Orthopedics, University of Vermont; Professor of Orthopedics, Polyclinic Hospital, New York City; Director of Orthopedics, Seaview and Seabright Sanitorium, Staten Island; Chief of Orthopedics, St. Vincent's Hospital; and Associate Chief of Orthopedics, St. Luke's Hospital, New York City, whose subject was "Lumbo-Sacral Disabilities, With Special Reference to the Disc Problem." Dr. Bosworth opened his paper by a discussion of some of the general problems of low back pain, in which he stated that diagnoses in the best hands were only approximately 70% correct, and that many of the minor problems in this group do not reach the surgeon, but are solved by the patient himself or by the family physician. Only when more serious problems reduce the earning power or cause serious discomfort to the patient will they reach the hands of the neurosurgeon or orthopedic surgeon, and of these cases operative procedures are carried out only in about one patient out of five. The remaining four or five patients are filtered out by such general examinations as pelvic, rectal, or abdominal examinations, which frequently reveal that the patient's difficulty is due to other than structural defects in the back. Among the problems which may simulate the disc syndrome, he mentioned tumor, both intradural and extradural, spinal lesions, such as tuberculosis, spondylolithiasis, osteoarthritis, and lacerated ligaments, hip lesions, sacroiliac lesions, femoral lesions, and neurological lesions such as herpes zoster. He stated that the question of whether the neurosurgeon or the orthopedic surgeon should do spinal surgery should be decided by the volume of spinal surgery which the particular man is familiar with, rather than by necessity. He presented a number of interesting cases simulating herniation of the intervertebral disc, where the true diagnosis was in one of the categories mentioned above. In the diagnosis of herniation of intervertebral discs, he discussed the history, physical examination, X-ray findings, and spinal fluid findings. He presented some cases to emphasize his feeling that pantopaque studies are not advisable. He felt that the diagnosis by this method was as large as it was by pantopaque studies, that the dangers of epidural injection and deposition of lipiodol in the cranial vaults and other portions of the body, with failure to remove all the material and the reaction of tissue to pantopaque, made this an undesirable procedure. He also stated that the position of the surgeon in advising operation on a patient with a negative lipiodol and spinal fluid findings was much more difficult than without these negative tests. This present

method of diagnosis emphasized the use of motion X-rays, taken in 4 positions, namely, side extension, side flexion, anterior-posterior, and 45° angle. In regard to treatment, Dr. Bosworth advised in addition to removal of the herniated disc, that fusion should be performed in all cases. He stated that the results of this fusion varied according to the number of vertebrae fused, and that when necessary the patient was re-operated to correct pseudo-ostosis. The paper was well-illustrated by lantern slides and charts.

The discussion of this paper was opened by Dr. Thomas Martin, who stressed the difficulty of persuading the patient or the industrial commission or insurance company of the desirability of re-exploration. He also mentioned the tendency of the commission to award these patients some degree of permanent disability. Dr. Leo McDermott expressed his surprise at Dr. Bosworth's strong opposition to myelography, and emphasized the difficulty of persuading the patient to undergo exploration for diagnostic purposes. Dr. George Maltby discussed the frequency with which the patients are presented without proper work-up, and mentioned the emphasis placed by the Army and Veterans' Administration on the use of pantopaque myelography. He was in disagreement with Dr. Bosworth concerning the necessity of fusion in all cases. In his reply to this discussion Dr. Bosworth stated that it was his custom to obtain consent for re-exploration and re-fusion if necessary before the first operation. He stated that he was in agreement with the industrial commission in allowing these patients some degree of permanent loss, and that he felt that the surgeon's service to the patient by his treatment was to get rid of the pain, and return the patient to work. He re-emphasized his feeling that fusion was advisable in all cases.

JOSEPH E. PORTER, M. D.,
Secretary.

Hancock

The annual meeting of the Hancock County Medical Society was held at the Hancock House, Ellsworth, Maine, December 10, 1947.

The meeting was called to order by the President, R. E. Weymouth, M. D. The minutes of the previous meeting were read and approved.

The following Officers were elected for the ensuing year:

President, M. A. Torrey, M. D., Ellsworth.

Vice President, James H. Crowe, M. D., Ellsworth.

Secretary-Treasurer, Robert H. Delafield, M. D., Ellsworth.

Delegate to the Maine Medical Association, Dr. Crowe. Alternate, Dr. Weymouth.

Censors: Drs. R. W. Clarke, Dwight Cameron, and P. L. Gray.

John E. Whitworth, M. D., of Bangor, spoke to the society on "Vertigo." This was followed by a period of general discussion.

J. H. CROWE, M. D.,
Secretary.



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*Dolkart, R. E.; Dentler, M., and Barrow, L. L.: The Effect of Various Types of Therapy in the Management of the Irritable Bowel Syndrome, *Illinois M. J.* 90:287 (Nov.) 1946.

SEARLE

**RESEARCH
IN THE SERVICE
OF MEDICINE**

Kennebec

A regular meeting of the Kennebec County Medical Association was held at the Augusta House, Augusta, October 23, 1947, with 37 present.

Supper at 6.30 P. M. was followed by a brief business session during which the record of the last meeting was approved.

Dr. Arthur Allen of Boston was the speaker of the evening. He first made interesting comments on his trip in England, the medical customs there, also of their toleration of the food situation. He gave an illustrated talk on the treatment of duodenal ulcer. It was a clear, interesting and enjoyable discussion. That it was interesting was evidenced by the group who questioned him afterwards.

A. H. MORRELL, M. D.,
Secretary.

A regular meeting of the Kennebec County Medical Association was held at the Elmwood Hotel, Waterville, November 20, 1947, with Frank Bull presiding. There were 40 present.

At 5.30 P. M., there was a presentation of cases by Doctors Ovide Pomerleau, Gieson, Hardy, Chasse, F. T. Hill, and Sewall — the cases in corresponding order were Miliary Tuberculosis, Fractured Femur, Sudden Death, Anuria, Ataxia and premature spontaneous rupture of the uterus.

Supper at 6.30 P. M., was followed by a brief business session. The records of the October meeting were approved. Doctors Philip Dachslager of Togus and John Nelson of Togus and Augusta, having favorably passed the council, were voted into membership.

Dr. George Van S. Smith gave an informal and very interesting discussion of female hormone therapy. It was a detailed, instructive talk. He regards the uterus as a potential source of malignancy that should come out if the woman is not possibly going to have children, and advocated asperation in cystic breast disease.

The prolonged attention and numerous questions proved that it was a valuable subject.

A. H. MORRELL, M. D.,
Secretary.

Penobscot

The regular monthly meeting of the Penobscot County Medical Association was held Tuesday, December 16, 1947, at the Bangor House, Bangor, Maine. Dinner was at 6.30 P. M.

Lloyd Brown, M. D., of Bangor, and Wilfred Butterfield, M. D., of Lincoln, were elected to membership.

Richard Warren, M. D., Chief of Surgical Service at the Veterans' Administration Hospital, West Roxbury, Massachusetts, was the speaker of the evening. Dr. Warren's subject was "Obliterative Disease of the Peripheral Arteries."

There were 51 members present.

J. E. SMITH, M. D.,
Secretary.

Piscataquis

A meeting of the Piscataquis County Medical Association was held in Milo, November 20, 1947. Dinner at the New Milo Hotel was enjoyed by twelve members and two guests.

Herbert E. Locke, of Augusta, Maine Medical Association Counsel, gave us a very practical talk.

We always have a good time when we get together up here in Piscataquis County.

N. H. NICKERSON, M. D.,
Secretary.

New Members

Cumberland

William C. Burrage, M. D., Portland, Maine.

Philip P. Thompson, Jr., M. D., Portland, Maine.

Penobscot

Lloyd Brown, M. D., Bangor, Maine.

Wilfred Butterfield, M. D., Lincoln, Maine.

Somerset

Henry F. Smith, M. D., Jackman Station, Maine.

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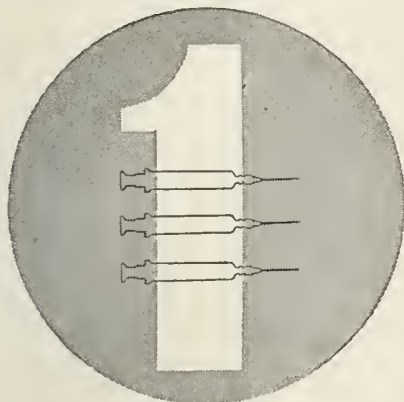
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News and Notes

Robert J. Barrett, M. D., opened his private practice of medicine in Bangor, January 2nd. Dr. Barrett, who has been serving as acting chief of the medical out-patient unit at the Veterans' Administration office, will serve part time as administrative head until a successor is appointed.

Bureau of Health Services for Crippled Children Clinic Schedule, 1948

ORTHOPEDIC CLINICS

Portland — Children's Hospital, 9.00-11.00 a. m.: Jan. 12, Feb. 9, Mar. 8, Apr. 12, May 10, June 14, July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.

Lewiston — Central Maine General Hospital, 9.00-11.00 a. m.: Jan. 23, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Rumford — Community Hospital, 1.30-3.00 p. m.: Feb. 18, Apr. 21, June 16, Aug. 18, Oct. 20, Dec. 15.

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 26, Apr. 22, June 24, Aug. 26, Oct. 28, Dec. 23.

Rockland — Knox County Hospital, 1.30-3.00 p. m.: Feb. 19, May 20, Aug. 19, Nov. 10 (Wednesday).

Machias — Normal School, 1.30-3.00 p. m.: Feb. 11, Apr. 14, June 9, Aug. 11, Oct. 13, Dec. 8.

Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Jan. 20, Mar. 3, May 4, July 7, Sept. 14, Nov. 3.

Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: Mar. 2, July 6, Nov. 2.

Fort Kent — Normal School, 9.00-11.00 a. m.—1.00-3.00 p. m.: Jan. 21, May 5, Sept. 15.

Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: Jan. 29, Mar. 25, May 27, July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 25, June 23, Oct. 27.

By appointment only.

PEDIATRIC CLINIC SCHEDULE — 1948

Bangor — Eastern Maine General Hospital, 1.30 p. m.: Jan. 30, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Waterville — Thayer Hospital, 1.30 p. m.: Jan. 6, Feb. 3, Mar. 2, Apr. 6, May 4, June 1, July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.

Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: Jan. 28, Mar. 24, May 26, July 21, Sept. 22, Nov. 17.

By appointment only.

State of Maine

Board of Registration of Medicine

Adam P. Leighton, M. D., 192 State Street, Portland, Secretary.

List of Physicians Licensed November 13, 1947.

Through Examination

Dr. Philip Dachslager, Augusta, Maine.
Dr. Dean Henry Fisher, Augusta, Maine.
Dr. Edmund Benedict Johnston, St. Stephen, N. B.
Dr. Anthony Manolio, West New York, N. J.
Dr. Hector Neil MacKinnon, Portland, Maine.
Dr. Henry F. Smith, Jackman Station, Maine.
Dr. Esmond Stiles, St. Stephen, N. B.
Dr. John Alden Woodcock, Bangor, Maine.

Through Reciprocity

Dr. Albert Aranson, Allston, Mass.
Dr. Lloyd Brown, Bangor, Maine.
Dr. Charles W. Capron, Jr., Calais, Maine.
Dr. Robert H. Dunn, Gardiner, Maine.
Dr. Nicholas Fish, New York, N. Y.
Dr. Walter Frederick Johnson, New York 7, N. Y.
Dr. Donald L. Kyer, Bangor, Maine.
Dr. Anthony Eugene LePore, Gardiner, Maine.
Dr. John Raymond Lincoln, Hartford, Conn.
Dr. Paul Maier, Philadelphia, Pa.
Dr. John Andrew Matheson, New York, N. Y.
Dr. Mary E. Miller, Bangor, Maine.
Dr. Gilbert M. Palen, Margaretville, N. Y.
Dr. Richard Battell Stephenson, US Marine Hospital, Staten Island, N. Y.
Dr. Warren Greenleaf Strout, Dexter, Maine.
Dr. Lyman Otis Warren, Jr., Bangor, Maine.

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(Franklin County)

Rangeley: Population 1464. Contact Dr. Donald J.
Winslow or Dr. John H. Moulton, Rangeley, Maine.

(Sagadahoc County)

Bowdoinham: Population 915. Contact Mr. Avery
Fides, Sagadahoc Fertilizer Company, Bowdoinham,
Maine.

(Somerset County)

Solon: Contact Mr. Eugene Secord, Treasurer,
Craft Bilt Boat & Canoe Co., Inc., Solon, Maine.

(York County)

West Buxton and Surrounding Towns.

For information write to Mrs. Frederick H. Davis,
West Buxton, Maine.

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Appointment of Commissioned Officers in the Medical Corps and Dental Corps of the Regular Navy

The statutory authority contained in Public Law 365—80th Congress, Title II (Army-Navy-Public Health Service Medical Officer Procurement Act of 1947) makes it possible now for civilian doctors to become commissioned officers in the regular Navy, provided they meet the professional and physical qualifications. This law is unique in that it does away with, for the first time, the age limitation of thirty-two years of age and permits doctors in civilian practice to enter the Navy and be commissioned with the rank up to and including Captain. The law considers all strata of the medical profession, internes, residents, reserves, former medical officers who have resigned, and present practicing physicians.

In order to make application a doctor must be a citizen of the United States, a graduate from a Class "A" medical school and have served at least one year's

internship in an approved hospital. Candidates will then be judged on a number of qualifications such as being a member of a specialty board, his teaching connections, the number of years of professional or scientific practice, hospital or laboratory connections, a statement of military service, etc.

The allocation of rank to successful candidates will depend upon their academic age, professional standing, and experience in the medical field. Successful candidates will then be integrated in line with medical officers of the regular Navy and assigned running mates accordingly. This means that they will be eligible for promotion along with their fellow officers of equal rank.

This law offers a fine opportunity for civilian doctors to make a career in the regular Navy and to enjoy its professional advantages as well as its retirement benefits. Doctors interested in such a career should write to the Bureau of Naval Personnel, via the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

HOSPITAL STAFF MEETINGS Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Wednesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

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The Journal of the Maine Medical Association

Volume Thirty-nine

Portland, Maine, February, 1948

No. 2

*Medical and Hospital Care of Veterans Under Veterans' Administration**

WINTHROP ADAMS, M. D., Veterans' Administration, Boston, Massachusetts

It is a privilege to discuss with you the medical program of the Veterans' Administration as it has been implemented and is now functioning under the distinguished leadership of General Omar N. Bradley, Administrator of Veterans' Affairs, and Dr. Paul R. Hawley, Chief Medical Director, but first, I wish to preface my remarks with a very brief outline of the overall functions of the Veterans' Administration, in order that you may have some conception of the scope of its activities.

The Veterans' Administration is an independent agency of the Federal Government, established to administer all laws pertaining to the relief of veterans, and as such, is responsible to the President, the Congress, and, of course, to the public. Briefly, these laws provide for the payment of compensation and pensions to disabled veterans of all Wars and peacetime service, and to dependents of veterans; education and vocational training of veterans of World War II; payment of insurance benefits

to veterans and their dependents; administration of loans to veterans of World War II, and the payment of unemployment compensation, or "readjustment allowance," as it is commonly termed; and last, but most important of all, medical and hospital care.

The actual expenditures for these several benefits during the current fiscal year which ends on June 30th, will be well over six billion dollars, and for the next year will be at least seven billion dollars. The major portion of this vast expenditure will be for education and vocational training, and readjustment allowance, as provided by the so-called G. I. Bill, and for compensation and pension. Expenditures at this high rate will not continue indefinitely, as certain benefits, such as vocational training, education and unemployment benefits have terminating dates in the basic laws, as for instance, 2 years, 5 years and 9 years after the termination of World War II, but it must be appreciated that World War II has not been officially terminated to date, and that it will not be officially terminated until a concurrent resolution of the Congress so proclaims. Consequently,

* Presented at the 93rd Annual Session of the Maine Medical Association at York Harbor, Maine, June, 1947.

those being discharged from military service at this time, even though they may have enlisted or were drafted after VJ Day, are technically and, in fact, actually, under existing statutes, veterans of World War II.

Compensation and pension payments, and medical and hospital care are permanent items in the basic laws. In fact, these benefits will continue over the years until the last veteran or dependent of a veteran passes away. In this connection it is of interest to note that the last dependent of a veteran of the War of 1812 passed away on March 12, 1946, 131 years after that War; there are 48 dependents of veterans of the Mexican War now on the pension roll; and there are at this time, 82 years after the close of the Civil War, a very few veterans of that war under hospital care.

Accordingly, even without another War in the interim, it is conceivable that the Federal Government may still be paying pensions, as the result of service in World War II, in the year 2070, and that there may be under hospital care, veterans of that War in the year 2030.

There have been no material changes in the laws providing for medical and hospital care for veterans since those enacted after World War I, but there has been a notable change in policies governing the application of those laws since the present administration took office in 1945. Immediately following World War I, medical and hospital care was authorized only for the relief of veterans afflicted with and in need of such care for so-called service connected disabilities. The laws were amended, however, in June, 1924, to provide hospital care additionally for veterans with non-service connected disabilities, providing there were beds available in Government hospitals and that the applicants for such care were unable to pay for the service elsewhere.

Accordingly, veterans of all Wars, as well as certain peace-time veterans are now entitled to medical and hospital care at Government expense, as follows:

1. Veterans of War and peace-time service for disabilities incurred in service, including in-patient and out-patient treatment for those disabilities, to be rendered in VA or other Federal Government hospitals and out-patient

clinics if beds and facilities are available, and the veteran's condition permits travel thereto, otherwise, treatment in civilian hospitals and clinics, or by private physicians in their offices or at the veteran's home, is authorized.

2. Veterans of Wars in which the United States has been engaged, for disabilities not incurred in service, including hospital care only in Veterans' Administration or other Federal Government hospitals, providing beds are available, and further providing the veteran states he is unable to pay for the required service elsewhere. There is one exception to this, in that female veterans may be hospitalized in civilian hospitals for non-service connected disabilities, at Government expense. There are certain legal and technical regulations, such as entitlement, character of discharge, length of service, etc., which must be met by the applicants, but I will not go into the details of these requirements at this time.

There is an estimated veteran population of approximately 19 million, including, in round numbers, about 15 million of World War II, and 4 million of World War I, other Wars and peace-time service, all of whom are potential beneficiaries of the laws providing for medical and hospital care. Following the first World War, during the late 1920's, with the doors of VA and other Government hospitals open to veterans for the treatment of all disabilities, however or whenever incurred, we then estimated that the peak load would be reached in 1947. That that estimate was approximately correct is indicated by the fact that during a recent month, there were hospitalized more than 51,000 veterans of Wars and service prior to World War II, a figure higher than that of 1939. The most recent figures relating to this subject are those of April 30, 1947, when the bed status reports recorded 105,000 in hospital, 51,000 World War II veterans, 54,000 veterans of Wars with service prior to World War II. Projecting this picture into the future, it is readily seen that we may anticipate or estimate the peak load of hospitalization under existing laws during the period between 1965 and 1970, and we are basing our requirements for hospital beds accordingly.

When General Hawley took over the direction of the VA Medical Service in July, 1945,

he found it more or less in the doldrums, due in part to the rather short-sighted policy of the previous administration, and also to a situation which required the furnishing of medical and hospital care to an ever increasing number of applicants, with a depleted and more or less discouraged and overworked personnel. He immediately saw the need for definite and drastic action looking toward the correction of defects and the furnishing of the highest possible standard of medical care.

It was readily apparent to him that it would be impossible to provide any kind of acceptable medical service to a potential load of 20 million veterans in more than 200 hospitals and about 218 out-patient clinics, with a completely full-time professional staff, and that the full-time staffs would have to be supplemented by the use of part-time physicians. Further, it was realized that to insure the highest standard of medical care of veterans, we should raise our hospitals to the standard required for approved resident training.

With this in mind, Dr. Hawley arrived at three basic conclusions shortly after taking office. First, that the assistance of the medical profession and medical schools was essential to the solution of this problem; second, that many of the new hospitals to be constructed for the care of veterans must be located in as close proximity as possible to medical schools and medical centers; and third, that legislation should be enacted to attract well qualified doctors, dentists and nurses to the Veterans' Administration as a career, and to provide for resident training.

Dr. Hawley approached the American Medical Association on this subject, and also met with the Deans of the approved medical schools, soliciting their coöperation. This was forthcoming from the first contact. The Congress fell in line through the enactment of enabling legislation in the form of Public Law 293, approved by the President on January 3, 1946. Since that date, the medical service of the Veterans' Administration has expanded remarkably in size and quality, with the result that the medical service of the Veterans' Administration is rapidly approaching that goal which Dr. Hawley intends to achieve, namely, a medical service for veterans second to none.

The enactment of the Law known as Public 293 had a most important bearing on the implementation of General Hawley's program for improvement of the medical service. That Law provides for the appointment of doctors, dentists and nurses without regard to Civil Service or Classification Laws or Regulations, with salaries and allowances commensurate with their training and experience; it provides for the further training in medical centers or universities of full-time employees, and for resident training in certain of our hospitals and clinics; it further provides for the appointment, on a part-time or fee basis, of Consultants and Attendings.

Prior to this enabling legislation, it was necessary, under Civil Service and Classification procedure, for a doctor to go to a higher administrative position before he could be paid a salary as high as \$7500 per annum. If the Manager of a hospital was paid \$7500, the Clinical Director could not receive more than \$6500, and the Chief of Surgery or Medicine was limited to about \$5600 to \$6000 per annum. In other words, under Government classification procedure, the job is graded and not the man who occupies that job. Under Public Law 293, the doctor, dentist or nurse is graded in accordance with his or her training and experience, and assigned where his or her services can best be utilized. If the doctor is certified by his Board, he receives an additional allowance of 25 per cent over his base salary, and we can now pay and do pay qualified doctors as high as \$11,000 per annum.

With a view to implementing this teaching program, Dr. Hawley met with the Deans of the approved medical schools of the country, and developed with them a plan for organizing the staffs of certain of our hospitals, with full-time, Consultants and Attendings, to meet the basic requirements of the Council on Education and Hospitals of the American Medical Association, and the American Specialty Boards. Committees of Deans, or Deans' Committees as they are termed, were organized for the purpose of selecting the consulting and attending staffs, and developing a satisfactory teaching program. The Boston Deans' Committee is composed of the Deans of Harvard, Tufts, and the Boston University Medical School. This

committee has developed the resident training plan at our hospitals at West Roxbury, Cushing and Bedford. The Deans' Committee at Yale has attended to the situation at Newington, and the Deans' Committee at Dartmouth has supervised the plans at White River Junction, Vermont.

The Deans' Committees have rendered an invaluable service to the Government and to the veteran. They have devoted much time, without compensation or emolument of any sort, and they deserve the highest commendation for their public service. If I should give you a list of the Consultants and Attendings whom the Deans' Committees have selected for our service, you would readily recognize most of them as outstanding in the profession, many of them nationally.

The Veterans' Administration is presently operating 126 hospitals, with 101,668 beds, about 95,000 of which are continuously occupied. It is also operating 218 out-patient clinics in Regional Offices and Sub-Regional Offices throughout the country, and at Porto Rico, Hawaii and Alaska. The professional personnel serving at these several hospitals and clinics comprises 3,409 doctors of medicine, 3,546 part-time doctors, 1,643 residents, and 1,394 young Army and Navy medical officers detailed to the Veterans' Administration for temporary duty. Then, there are 860 dentists, 10,668 nurses and 1,883 cadet nurses receiving affiliated training, for the most part in psychiatric nursing.

To administer, supervise and control the operation of this vast organization, it was necessary to decentralize many of the activities from the Central Office at Washington to 13 Branch Offices, one of which is in Boston, having control over all activities in the six New England States. Thus, we have the policy-making level at Washington, the control and supervisory level at the Branch Offices, and the action level at the field installations.

I have given you an idea of the organization from a national standpoint. Now, I will describe more in detail the set-up of our activities in New England, which are comparable with those in other sections of the country.

In New England at the present time we are operating 8 hospitals, with about 6400 beds

available, and 16 out-patient clinics, staffed with 202 full-time doctors, 258 part-time doctors, including Consultants and Attending Physicians, 120 residents, 83 young Army and Navy officers detailed to the Veterans' Administration temporarily, 37 dentists, 649 graduate nurses and 105 cadet nurses assigned for affiliated training. At the present time 67, or about 33 per cent of the full-time physicians have been certified by an American Specialty Board, and practically the entire group of the 258 Consultants and Attendings are Diplomates.

Our hospitals in New England are located with bed capacities as follows: West Roxbury—382 beds, general medical and surgical, with resident training approved or pending approval in surgery, medicine, pathology, anesthesiology, orthopedics and neurology; White River Junction, Vermont—239 beds for general medical and surgical cases, with resident training approved or pending approval in medicine, surgery, anesthesiology, pathology and radiology; Bedford, Massachusetts—1,822 beds, including 85 beds for women, for nervous and mental diseases, with resident training approved in psychiatry; Rutland Heights, Massachusetts—498 beds for tuberculosis, with resident training pending approval; Northampton, Massachusetts—1,095 beds for nervous and mental cases—no resident training; Newington, Connecticut (near Hartford)—400 beds for general medical and surgical cases, with resident training approved or pending approval in medicine, surgery, anesthesiology and otolaryngology; Cushing VA Hospital, Framingham, Massachusetts—1,000 beds, general medical and surgical, including neurosurgery, neuropsychiatry, and tuberculosis. Here, we have one of the country's 7 paraplegic centers, with about 150 severely disabled veterans of the late War, afflicted with the residuals of transverse cord injuries. We also have at Cushing a unit of 52 beds for women, about 300 beds for neuropsychiatric conditions, including psychoses, and 52 beds for tuberculosis. We have also established at Cushing, a Center for the rehabilitation of aphasics, and one for the treatment of traumatic epilepsy. Resident training has been approved at Cushing, or is pending approval, in medicine, surgery, neuropsychiatry, neurosurgery, orthopedics, pathology and radiology; Togus, Maine, with 924 beds, in-

cluding about 600 for nervous and mental cases, and 300 for general medical and surgical conditions.

The fundamental purpose of the operation of our hospitals is to furnish the best possible medical care to veteran patients. In carrying out this program, we feel that such care can best be furnished only in close integration of all the services — medical, surgical, neuropsychiatric, laboratory, social service, etc. It is further believed that the best quality of medical care is available in a hospital which has not only integration among all its services and free interplay among the various specialties, but also an active teaching program in all of the specialties.

As during the years following the first World War, more than half of our hospital load falls in the neuropsychiatric category. Here in New England, with about 6,000 patients in VA Hospitals, occupied continuously, 3,600 are of this type, at Bedford, Northampton, Togus, and Cushing. About 1,700 are receiving care for medical and surgical conditions at West Roxbury, Cushing, Newington, White River Junction, and Togus, and the remainder, about 700, are tuberculous, hospitalized at Rutland Heights, Massachusetts, Cushing, and a few at certain of the other hospitals. Apparently, this ratio applies nationally, as during a recent week, with 100,000 veterans under hospital care in VA Hospitals, 54,000 were classified as neuropsychiatric, 35,000 as medical and surgical, and 11,000 tuberculous. The preponderance of neuropsychiatric cases is to be expected, when we realize that 534,000 discharges from military service — Army, Navy and Coast Guard, during the recent War, were for neuropsychiatric reasons. Of this group, it is probable that at least 30,000 reside in the New England area, and the majority of these veterans can and probably will establish service connection for any disability which might classify as neuropsychiatric.

It is with this group that we hope to assist in adjustments to civil life through our Mental Hygiene Clinics, three of which have been set up in this area, at Boston, Providence, and Hartford.

The out-patient service of the Veterans' Administration is important, practically on a par

with the hospital service. The out-patient service is especially important in connection with the examination of veterans who have applied for certain benefits provided by Law, particularly compensation, pension, and vocational training. The total of running awards for disability compensation and pension, as of March 31, 1947, throughout the entire country, was 2,207,926, of which 1,733,880 were veterans of World War II, and 430, 835 veterans of World War I. In the New England area, the total number of running awards, as of the same date, was 162,768, of which 129,525 were for veterans of World War II, and 24,462 veterans of World War I. In the State of Maine, the figures were as follows: Running awards total 14,119, of which 11,323 were for World War II, the remainder World War I. The total number of disability applications received during the past three or four years was 5,532,729 nationally.

Each veteran who applies for compensation, pension, or any other benefits, alleging disability incurred in his military service, must be given a complete physical examination, with such additional special examinations as are indicated, to determine the nature and extent of disability, if any, on the findings of which the claim is adjudicated under established procedure, and an award of compensation or pension is made, based upon the findings. To give you an idea of what this work means to an out-patient department of the Veterans' Administration, the total number of examinations made during the month of March, 1947, for this purpose throughout the country, as a whole, was 722,892, and during the same month, the number of out-patient treatments given in the out-patient departments of the Veterans' Administration was 616,856. In the State of Maine, during the same month, there were 3,862 examinations made, and 4,245 out-patient treatments given.

As stated previously, to provide this out-patient service, the Veterans' Administration has established 218 out-patient clinics at Regional and Sub-Regional Offices throughout the United States, and in Porto Rico, Hawaii and Alaska. At the Regional Offices and many of the Sub-Regional Offices, complete equipment has been installed, including X-ray and

Laboratory, with complete full-time staffs, supplemented as required by part-time or fee basis attending physicians and specialists. In addition, it has been and always will be necessary to utilize the services of physicians on a part-time or fee basis in cities and towns where no regularly established Veterans' Administration clinic is located.

Many of you have probably heard of the so-called "home town care plan" which has been sponsored by the Veterans' Administration, for the purpose of providing out-patient treatment in the locality in which the veteran resides. Considerable misrepresentation and misleading publicity has been given this plan during the past year. It has led many physicians, as well as the veterans themselves, to believe that the latter could go to their own family physician for any sort of medical treatment, at Government expense. The press releases did not stress, as they should have, the fact that the Veterans' Administration could pay only for the treatment of service connected disabilities, and that except in emergencies, the veterans should obtain prior authorization for the service required. Further, it was not made clear that the Veterans' Administration must use its established clinics to full capacity, and that veterans may be referred to private physicians only when reporting to the VA clinic would work a hardship, such as loss of time from employment, or by reason of conditions prohibiting travel. The implementation of this plan required, first, that a satisfactory agreement be reached between the Veterans Administration and the State Medical Societies, or a State Medical Service, if such existed, as to fees to be paid for the various services, and these negotiations have been under way throughout the past year, with the result that acceptable agreements have been accomplished in the majority of states in the Union. As many of you know, such negotiations were carried out in Maine, through the Associated Hospital Service of Maine as an intermediary, and this arrangement has been functioning in this State for sometime past. As regards the manner in which it is functioning, many of you physicians must be in a better position to determine whether or not it is a satisfactory arrangement.

It must always be borne in mind that while hospital care in Government Hospitals is avail-

able to veterans of all Wars, and certain veterans of peace-time service, under certain regulatory requirements, regardless of how or when the disability requiring treatment was incurred, out-patient treatment, on the other hand, is available only to veterans for the relief of disabilities which have been adjudicated as having been incurred in service, or, in other words, service connected.

As far as I have been able to determine from reports and records of recent date, there are approximately 13,000 veterans of Wars or peace-time service, in Maine, whose disabilities have been adjudged as service connected and who, accordingly, are entitled to out-patient treatment for those disabilities. It must be appreciated, however, that many of these disabilities, such as amputations, loss of sight and hearing, as well as residuals of wounds are more or less static and permanent, and will require little, if any, medical attention. Others, however, such as pulmonary, cardiac, and various other organic diseases, as well as nervous or mental afflictions will require out-patient care, as well as hospital care, over an indefinite period. Accordingly, while there are probably approximately 116,700 veterans residing in the State of Maine, not more than 13,000 of them, or in other words, those adjudged to have service connected disabilities, are entitled to out-patient treatment for those disabilities at Government expense. This provision in the basic law, of course, makes for a complication in providing for medical service for veterans, particularly out of hospital, and has been the cause for considerable dissatisfaction at times, throughout the country, on the part of doctors, pharmacies and other institutions furnishing medical services, for the reason that certain services have been rendered to veterans for which payment cannot be made.

Over the years, since the first World War, the question has been raised repeatedly, as to how far the Federal Government should go in furnishing medical and hospital care to those who served in the military forces. There has never been any question as to the Government's obligation to those who became disabled as a direct result of their service, and I assume that no serious objection can be raised to Governmental provisions for the care of the mentally

afflicted, and the tuberculous, regardless of the time of incurrence of disability.

The possibility of further amendments to the laws to provide out-patient care for veterans for non-service connected disabilities cannot be ignored. Continually over the years, since the first World War, Bills have been introduced in Congress on this subject. To date, none have been enacted, but the trend is unquestionably in that direction. Such an amendment would have considerable bearing on the distribution of medical care, and would most certainly require a much wider utilization of physicians on a part-time or fee basis than under existing procedure. Then again, I can visualize the possibility of legislation providing for medical care of dependents of veterans at Government expense. Only recently, a Bill was introduced in Congress to provide medical out-patient and hospital care for widows and children of veterans who lost their lives in combat during the recent War, and within the past week a Bill was introduced to provide a complete medical service to widows and minor children of veterans who have died of service connected disabilities.

I have attempted to portray the scope and functions of a vast Governmental activity providing for the welfare of veterans, indicating that the peak load in medical and hospital care will be reached between 1965 and 1970, when the VA will, under existing laws, operate nearly 300,000 beds in 200 or more hospitals. I have also indicated the potentialities of pending legislation.

At this time, when other agencies of the Fed-

eral Government can and should trim their budgets to peace time requirements, the VA is compelled to increase its expenditures to pay for the effects of War, for, as far as expenditures for veterans are concerned, the War has only begun. We cannot hold out a promise of near or substantial reductions, and at the same time provide the service and benefits voted by Congress. The public can anticipate a period of unprecedented expenditures for veterans' benefits for 10 years or more.

During the coming fiscal year, beginning July 1st, 20 cents out of every Federal tax dollar will go for benefits to veterans and the administration of these benefits. Over five billion of the seven billion appropriation will be expended for direct cash benefits to veterans or their dependents.

Without interference and with a continuance of its expansion under policies adopted by the present administration, medical care will be afforded veterans in accordance with the highest concepts. Medicine has already, during the 20 months of the Bradley-Hawley administration, advanced to a point where it is one of the outstanding medical programs of the world. Veterans entering our hospitals today are assured of treatment at the hands of physicians who are among the best qualified in the country. The goal has been achieved primarily because the doctors of this country responded wholeheartedly to our call for assistance, and brought to our hospitals the vast resources of their skills, knowledge and experience. For that assistance, the Veterans' Administration is sincerely grateful.

Humanity has always shunned responsibility. Even today, though there is widespread intellectual acceptance of the concept that much disease is preventable, the emotional attitude is not much altered and illness is considered as intrusion, a misfortune due to factors beyond control of the individual. As a whole we have not yet awakened to the idea that the health of men and women is their own responsibility. Edward J. Stieglitz, M. D., *A Future for Preventive Medicine*, The Commonwealth Fund, 1945.

The basis for the concerted Scandinavian mass BCG vaccination is the importance tuberculosis plays even today as a endemic disease—the commonest chronic disease in people between 15 and 30 years. Approximately 50 per cent of this age group do not react tuberculin. These non-reactors have proved more susceptible to progressive tuberculous disease when infected than those in whom a positive tuberculin reaction indicates a previous infection. Konrad Birkhaug, M. D., *Am. Rev. Tbc.*, Mar., 1947.

*The Professional Audit to Control Efficiency**

FREDERICK T. HILL, M. D., Thayer Hospital, Waterville, Maine

The Staff Audit, originally designated by Ponton as Professional Service Accounting, was designed primarily to insure the best standards of medical service. As it is based upon the clinical records a brief review of the purpose and value of records might be in order.

Every hospital today recognizes the necessity of good records. Yet many institutions have difficulty in obtaining good records, largely through inertia on the part of the staff. Too often records are considered a nuisance by the busy physician, especially if he is not scientifically minded. The old excuse that he might belong to that age-group who were not trained in record-writing rarely holds today. As interne or resident he has had responsibility for writing records. But too often this responsibility has been his alone, a chore pertaining to his position and neglected by his visiting staff. And when he finally attains his own practice and staff membership, often in some other hospital, he may tend to neglect this responsibility, relegating it to the sphere of the interne. Forced, by hospital regulations to write his records, he may do so carelessly, inaccurately or tardily, with inevitable results.

A good record should give a complete and accurate picture of the patient, including everything pertinent to his illness, the reason for his admission to the hospital, all diagnostic and therapeutic data, observations on his course in the hospital, and the deductions from this accumulated information. Family, past and present history, findings on examination, laboratory studies, records of surgical procedures or responses to therapeutic measures and intelligent day-by-day progress notes are all necessary to substantiate a diagnosis and a prognosis. This demands the daily recording of one's observations. Not only does this make a better record but it makes for greater accuracy in observation.

Unless we can have records at least approach this standard, I believe one might almost

as well do without them. For the careless, inaccurate record does not present a true picture of the case and may be misleading and dangerous, as well as dishonest.

Would we expect an intelligent person to entrust his financial affairs to a bank or an investment firm which did not keep accurate accounts of all of its transactions? Should we then expect people to entrust their health or their lives to us if we do not keep as accurate accounting of these even more priceless possessions? This may be of great importance to the patient, the physician or the hospital in some later insurance or medico-legal matter.

One of the best reasons for insisting upon good records is that should any unforeseen contingency make it necessary for another physician to assume the care of the patient, he will have readily accessible all necessary information, up to date, to enable him to proceed intelligently and to the best interests of the patient. This may vary from meeting a sudden emergency, to taking complete and final charge, but it is something that should always be prepared for.

The necessity of providing record-room personnel and equipment is well recognized. Facilities are essential and recording should be made a daily routine easily carried out. Recording apparatus is a great help and a time-saver for all concerned.

Records should be written to be used, not simply filed away. Records which are compiled merely to meet hospital regulations or to "get by" inspection by the College of Surgeons are usually of little value. Records should be "live records," of accurate, daily observations and used as such. They are essential for clinical research, and provide valuable teaching material for the weekly staff programs.

Ponton's basic idea of the Staff Audit was that of "making a comparison of the results actually attained in the treatment of a patient with those results which might reasonably be expected from the prognosis, the comparison being made from recorded data." It was origi-

* Read before the American College of Surgeons, New York, September 8, 1947.

nally suggested for the purpose of grading members of the medical staff for promotion and to determine their competence and the amount of professional privileges they should be allowed in the hospital. As such this system seemed particularly applicable to the large teaching hospital with medical school affiliations, but of less importance to the average community hospital. The latter type of institution was not especially concerned with staff promotions and seniority, and in the past the responsibility for according professional privileges was not always realized, or acknowledged, at least in the case of private patients.

Now it is becoming generally recognized that the hospital, no matter what its type, or size, must assume responsibility for the safety and best interests of all patients, both service and private; and must be responsible for providing adequate medical service of the highest possible standard.

All physicians are not equally skillful in all fields of practice and more hospitals are coming to departmentalize their professional services. Training, experience and natural ability limit the field of competence, and if safety and proper standards of care are to be assured this must be recognized, otherwise the hospital is little more than a medical boarding house. Hospitals therefore have become more and more concerned with the quality of professional work within their walls and have sought ways to improve this.

Consequently the Staff Audit has been utilized, not so much for purposes of grading for promotions as for determining competency and for appraising results. And where used conscientiously and over long enough period it has proved of great value. Ponton's original plan of service accounting may easily be modified and adapted to almost any hospital, provided there be satisfactory records to work with. And it has been found that the routine use of the Audit is one of the best means of improving records and keeping them up to standard. This has been our experience at the Thayer Hospital over the past eight years that we have used the Audit. It is a most effective means of developing a "Record-conscious Staff."

As modified for our use, once each week at a stated time all of the records of patients dis-

charged during the week are carefully reviewed by the record committee and the Medical Director. Any member of the staff is welcome to sit in at these audits. The Record Committee is largely a continuing committee, from year to year, although certain of its personnel may be changed at times. It is appointed by the Medical Director and consists of members selected for their interest in, and knowledge of good recording procedure, and to give a broad representation of the departments of the hospital. For example, at present it consists of one surgeon, one medical man, one obstetrician and the anaesthesiologist, while the Medical Director is an oto-laryngologist. To supplement this group we may call in specialists in other fields whenever it seems indicated. This procedure is carried out every week throughout the year. And rarely does a member absent himself from this assignment.

Following Ponton's original plan, the cases are classified as to type; as Surgical, Medical, Obstetrical, etc.; and Elective, Emergency or Palliative, then the risk is considered as Good, Fair or Poor, based upon the findings on admission. Here we deviate slightly from Ponton in that the risk is determined by the auditing committee rather than the physician in charge of the case. Our experience, we believe, suggests that this gives a fairer appraisal of what the risk should have been on admission. Then the result attained on discharge is compared with that which might be reasonably expected. This is listed as Recovered, Expected or Unexpected; Improved; Unchanged; or Died. Deaths are further classified as Inevitable, Justifiable or Non-justifiable. These terms are all abbreviated on the audit form sheet. (See examples appended.)

Next, the record is criticized as a whole. Is it complete as to history, physical examinations, laboratory data, operative findings, etc.? Is it accurate? Do the progress notes tell the story of the patient's course? Is the record well organized? Has the physician used good English? All criticisms are noted, or the record is marked "O. K." if satisfactory.

The number of consultations are noted, whether individual, departmental or staff; and omission when consultations seem indicated. Emphasis is placed upon the free utilization of

consultations whenever the patient would seem benefited thereby.

Next we note any errors of Diagnosis, Judgement, Treatment or Technique. Then we have a space for the physician's initials for identification and finally one for notes which include the general diagnosis and information pertaining to errors or criticisms, and in case of death whether or not post-mortem examination was performed.

All this is done on a work-sheet which is signed by the auditing group. This is then turned over to the record department for typing in final form. All deaths or cases which were subject to any criticisms are check-marked to indicate that these are to be typed in red, thus easily calling attention to these in later analyses. These are kept on file for reference and analyses are presented to the staff from time to time. Recently, we have assigned vertical analyses, covering portions of the year's audit, to younger members of the staff. For example, one man is asked to analyze the deaths for 3 months, another the errors and a third to correlate the risks and results, etc. Besides bringing this information to the staff, it affords the newer men an opportunity of acquainting themselves with the audit and emphasizes the importance of good records. A complete analysis of the audit for the year is included in the Annual Report of the Medical Director, a copy of which goes to each member of the Board of Trustees and of the Staff.

We are not particularly concerned with grading the men but rather to be conversant with the successes and failures of all kinds in order to effect improvement and to stimulate interest in the professional work. It does furnish a valuable check on the abilities of the different men and at times has picked up certain weak points which we have been able to correct.

A confidential note on a form provided for the purpose is sent to each physician responsible for any error or omission, calling his attention to the criticism. A master sheet carrying notations to this effect goes to the Record-Librarian, so that she will call the attention of the physician to this criticism and enable him to correct it if it be some omission.

This has become so well established that there is never any apparent resentment. It is

kept confidential as far as the individual physicians are concerned, although any errors are presented to the staff, without mentioning the doctor's name. If the member receiving a criticism does not readily understand the reason for it, he takes it up with the Medical Director when it is discussed in a friendly but frank manner. Should there be indication for disciplinary action or limitation of professional privileges, this is likewise handled quietly by the Medical Director. Should further action be necessary it is referred to the Trustees, with both the Medical Director and the offending physician present.

The audit, as we use it, is primarily to improve the standards of professional service, which of course includes improving records, and only secondarily for criticizing performances. Emphasis is always upon the constructive. As a result we find that rarely is disciplinary action or limitation required. The men recognize their limitations and are loathe to exceed them. And when errors or mistakes occur—and they always will, for Medicine is not an exact science—the men become conditioned to admitting to these readily — usually in the record. This is healthy for if a mistake is recognized and frankly admitted, a lesson is usually learned and it is not apt to happen again.

The system is democratic. While the audit is carried on by a permanent committee, any staff member may sit in and, if criticized, may defend his case.

It has been stated that such a system would be impossible of application in a large hospital due to the volume of records. I do not hold with this. I have good reason to believe that there are proportionately just as many errors or omissions in the large institution as in the smaller one. If this be so it is just as important to find out about them and correct them. It has been suggested that only the deaths and perhaps the serious cases need be audited. I do not hold with this. From experience I know that some of the worst omissions or most glaring errors may occur in cases which recover and have a seemingly uneventful convalescence.

It is possible to screen the majority of records in a well-run hospital quite easily, especially after the audit has been in use for some-

time. Those records requiring more careful scrutiny can be picked up and more time given to them. In the large hospital this screening can be done in the different departments, and the records requiring more thorough study referred to a general auditing committee of the hospital. Such a committee would naturally include qualified representatives of all the departments, including the pathologist. In some such manner all records would be audited and those about which there were any doubt would receive thorough appraisal. It does require a certain number of staff members who will be interested enough to devote a little time to this but both the staff and the hospital will be re-

paid by improved professional service. It may take "Consecrated Souls" to inaugurate it but these should not be too difficult to find in our hospitals.

The routine use of the Staff Audit—if carried out conscientiously and courageously, result in:

- Better records.
- Records written on time.
- More consultations.
- A better percentage of post-mortems.
- Fewer errors.
- And better all-round professional standards of service.

APPENDIX

AUDIT FOR DR. RECORD

CONFIDENTIAL

The above case record is not in accordance with hospital standards for these reasons:

You are requested to correct same with Record Librarian.

"SAMPLE OF AUDIT SHEET"

DATE

	Type	Risk	Result	Record	Cons	Errors	Md	Notes
56708	S - El	G	R. Ex.	O. K.	1	O	A.B.	Hernia
64901	M - Em	P	D. - J.	O. K.	111	O	C.D.	Coronary Thrombosis - Post Mortem
76114	Obs. - El	G	R. Ex.	History is sketchy	Indicated - not held	J	E.F.	Para. 1 - Section - Disproportion
99164	OL - P	P	D. - Inevit.	O. K.	1	O	G.H.	Ca. - Esophagus
87617	S - Em	F	D. - not J.	Inadequate lab.	Indicated	D	I.J.	Peritonitis - Ruptured Viscus

Clinical Pathological Exercise

Case Presented at the Maine General Hospital, Portland, Maine

Edited by JOSEPH E. PORTER, M. D.

This is the case of a 21-year-old white, married female, who was admitted to the hospital with a chief complaint of left lower quadrant pain of two months' duration. History went back 5 years, at which time the patient experienced soreness in the left lower quadrant, which lasted 2-3 days. This soreness recurred about once a year, without any other attendant symptoms. Patient was married two months before admission. About two weeks after her marriage she experienced left lower quadrant pain, accompanied by low-grade fever. There was no nausea, vomiting, or diarrhea or dysuria. Menstrual periods had been regular every 28 days, lasted 3-4 days and were frequently associated with rather severe pain. Patient had always had a slight whitish discharge, which had been more marked during the 6 weeks before admission. Last menstrual period had occurred three weeks before admission; previous one 28 days before that. P. H. was negative, except for measles, chicken pox, and whooping cough. Exposure to venereal disease was denied. She had never suffered any severe infections, accidents, or operations. F. H.: Father and mother aged 45, living and well; two sisters living and well. There was no family history of disease such as diabetes, rheumatic fever, or tuberculosis.

P. E. at this time revealed a normal cervix, moderate whitish discharge. Fundus appeared to be definitely enlarged; there was a questionable mass about 2 inches in diameter in the left vault adjacent to the fundus. It was moderately tender but movable.

The patient underwent operation, and a parovarian cyst was removed on the right, together with the appendix. Uterus was found to be commensurate in size with a two-months' pregnancy, and for that reason was not disturbed. An A-Z test was done following operation, which was reported as negative.

Five months later the patient was readmitted. Following her discharge she did fairly well, ex-

cept for moderate dysmenorrhea. Two months previous to this second admission she began to notice definite lower abdominal enlargement, which was visible and palpable. Two days prior to the onset of each menstrual period she had severe lower abdominal pain. Flowed profusely, with clots; on the second day of her period the pain and the abdominal mass would disappear.

P. E. revealed a temperature of 99.4°, pulse 100, respirations 20; B. P. 118/60. Well-developed and well nourished. Head was negative. Pupils reacted to light and accommodation. Sclerae were clear; nose was not remarkable. Mouth: Teeth in good condition, as was mouth. Throat was negative. Chest was clear to P & A. Heart was not enlarged; sounds were of good quality; regular rhythm; no murmurs. Breasts were not remarkable. Abdominal examination showed definite fullness in the lower addomen above the pubis, and to the left of midline. Palpation suggested a firm, oval tumor, about the size of a four-months' pregnancy. The cervix was small, with a pinpoint os; fundus was symmetrically enlarged, size of a large orange. Rectal examination was confirmatory.

Laboratory: Admission blood count showed a Hgb. of 76%, 11 gms.; RBC 4,060,000; WBC 10,800; 75% neutrophils, 25% lymphocytes. Platelets were normal; RBC were essentially normal. Urine: PH 5.0, S. G. 1.016; albumin 5 mg.; no sugar, acetone, diacetic; sediment: 4-6RBC, 8-10 WBC, with a few clumps; Kahn and Hinton negative.

On the second hospital day the patient underwent a diagnostic dilatation and curettage. On the fourth hospital day she underwent a laparotomy. She was discharged on the 17th hospital day, 13 days after operation.

Dr. Alvin Ottum: Here is a 21-year-old girl who had been married two months at the time

of her first admission. Her history goes back five years, but in view of subsequent findings, I don't believe that we need consider a five-year history on her.

At the time of her first operation she definitely had an enlarged uterus consistent with two-months' pregnancy, and at that time a parovarian cyst was removed from the right adnexal region, yet all pain had been on the left. No description is given as to what the left adnexal region appeared like but I assume it was probably normal. The assumption apparently was that she had a pregnant uterus. Even though the A-Z test was negative, that does not always mean that a pregnancy does not exist. After her discharge, she menstruated regularly with profuse menstrual flow. In addition to that she noticed definite swelling in the abdomen two days prior to her menstrual period. That points strongly towards endometriosis, and in view of the uterine enlargement at previous operation it points to an endometrioma or adenomyosis. There are other things to consider before arriving at any definite conclusion. I think any of us can do a pelvic examination and feel that a tumor is an enlargement of the uterus, but which might well be an enlarged ovary. This other mass could be a parovarian cyst arising from the left, as they are apt to occur bilaterally; or the tumor removed might have been a dermoid cyst, and she could have had one develop on the other side. She is a young lady, only twenty-one, but we should consider fibroid tumors of the uterus which could be submucous or intramural in location, which would give the uterus an enlargement resembling pregnancy. The other thing we must consider is the possibility of a pregnancy and a missed abortion. I presume that even a bicornate uterus might be considered with enlargement of one or both horns. It could be a combination of myomatous uterus with adenomyosis going on within a centrally-located myoma.

I think the significant thing is the fact that two days prior to the onset of every period she had severe lower abdominal pain, also swelling, and a palpable and visible tumor. After the second day of her period this pain and swelling would disappear. I think if I were to stick my neck out I would call it adenomyosis or endometriosis, with a possibility of uterine fibroid.

Dr. Franklin Ferguson: Dr. Parker, do you remember the case?

Dr. James Parker: I don't think I can add anything to what Dr. Ottum has said. The rather striking decrease in the size of the abdomen within 48 hours after the onset of her period suggests to my mind the possibility of a cervical stenosis.

Dr. Ottum: She had so-called pinpoint os.

Dr. Parker: Would you expect an enlargement due to adenomyosis to recede as rapidly in 48 hours? I would think it would take a considerably longer time.

Dr. Ottum: That's a possibility as far as swelling is concerned. I think the thing points to endometriosis some place, and it is possible that she might have had an implant near the sigmoid, with a dilatation of the bowel above it to give her this pain and swelling. The palpable mass is a definite mass and apparently the size of four months' pregnancy.

Dr. Jack Spencer: You put endometriosis first then?

Dr. Ottum: It certainly seems to fit into the picture of endometriosis.

Dr. George Temple: I think there is a good possibility that she might have had a stenosis of some type.

Dr. Ronald Bettie: I can't think of anything like that which would go down so rapidly. Would that actually happen, or is that only the patient's story? I think I'll bet on a parovarian cyst.

Dr. Spencer: The pre-menstrual pain is diagnostic of endometriosis.

Dr. Ottum: Of course, cervical stenosis could be considered a cause for endometriosis. She has a pinpoint os.

Dr. Bettie: Even if she did have a pin-point os you wouldn't expect a mass like that.

Dr. Spencer: Would a D & C dilate the cervical canal permanently enough?

Dr. Ottum: I think so. I have seen the uterus get as big as a 3-4 months' pregnancy from a cervical stenosis, following conization of the cervix.

Dr. Parker: How about the visiting doctor from New York?

Continued on page 42

The President's Page

This open letter is written to the members of the various Committees of the Association. I am hoping that you will each one consider it a moral obligation to attend at least one of your Committee meetings. In times past too often we have had no meetings of several of the standing committees, and consequently no report at the annual session. I know that you doctors are busy, but the chairmen of the different committees could call at least one get-together to be held at the Annual meeting at Poland Spring. This must be held on Sunday or Monday as frequently there is no meeting of the House of Delegates on Tuesday.

I am hoping that in making up future Annual Budgets that more money will be allocated for the use of the various committees. Surely a Doctor that gives his time, and pays his own travel expenses to the meeting place, is entitled to at least a feed at the expense of the Association.

I wish to thank members of the Special committees for the time and effort that they are putting into their work. The Committee on Prepayment Insurance have given a lot of thought to various plans now working in other states. I am sure they will have something constructive to offer the Society in June. Your Rural Health Committee has met, and they too will have something to offer our Rural Communities for better Medical care. Ed Herlihy and his Governor-appointed committee still meet, gather data, and hope for the time to come when an angel will appear on the scene to give us that much needed Medical School.

Your scientific Committee has had several meetings to present a Program that is to be of Special interest to the General Practitioner at the Annual Meeting.

The Executive Secretary, W. Mayo Payson, now feels that he understands what the Association needs. He is really doing a swell job. If you have Political or Economic problems write to him or : Secretary Frederick R. Carter, M. D., at 142 High Street, Portland, Maine.

"Sorry about the *prod*, but we have work to do."

STEPHEN A. COBB, M. D.,
President, Maine Medical Association.

Editorial

A. M. A. Demands Housecleaning of Doctors Who Accept Kickbacks

In an editorial appearing in the January 17 issue of *The Journal of the American Medical Association*, the board of trustees of the A. M. A. calls upon leaders of the medical profession to act promptly in ridding the medical profession of physicians who accept rebates, kick-backs and commissions.

The editorial follows:

The pride of medicine as a profession has always been its freedom from the taint of barter and trade in the sick patient. Physicians must give their whole-hearted devotion to the care of the patient; no other objective must be given precedence over considerations of the patient's need. Nevertheless, the charge is made that some physicians have forgotten the ethical principles that prevail in the relationship between doctor and patient and have selected the surgeon willing to make the greatest division of fees rather than the one best suited to perform the operation. Ophthalmologists have sent the patient for lenses to the optician who returned a proportion of the fee rather than to the optician who rendered the highest quality of optical service. Occasionally orthopedic surgeons and others who utilize the work of the maker of braces, splints and elastic bandages have been willing to accept commissions from such manufacturers and have delegated the procurement of these accessories to the agency offering the largest commission rather than to the one most painstaking in production and most reasonable in price. From time to time criticism has been leveled against pharmacists who have offered commissions to physicians on the prescriptions sent to them and to the physicians who have accepted such commissions. Wherever barter and trade have insinuated their insidious and evil aspects into the practice of medicine, the quality of the service has depreciated. The morals of the physicians and the commercial agencies that deal in these unwholesome profits in this marketing of medical care have already deteriorated.

From the beginning of its entrance on the medical scene, the American Medical Association has fought this menace to the quality of medical service and to the good repute of medical practice. Resolutions have been passed by the official bodies of the association unequivocally condemning such practices. The Judicial Council has repeatedly urged the expulsion or other action against physicians proved to have participated in such procedures. The leaders of surgery, ophthalmology, orthopedic surgery and pharmacy have been unanimous in pointing out the extent to which such commercial considerations may break down the good repute of the specialties concerned. The American College of Surgeons adopted an oath to be taken by its fellows to the effect that they would not participate in the secret division of fees. The Principles of Ethics of the American Medical Association have declared the unethical character of such divisions—direct or indirect.

Now the development of greater complexity in medical practice and in medical relationships has introduced new factors into this problem of barter and trade. The development of roentgenology (X-ray examination and treatment) as an important medical specialty and the establishment of clinical pathologic laboratories to which physicians send patients for the making of highly technical and often costly tests have introduced new sources of rebates, kick-backs and commissions. In some communities means have been proposed for evading the condemnation of medical organizations and societies through the establishment of corporations, co-operative laboratories and roentgenologic offices of multiple ownership.

As might have been anticipated, the ultimate development was recognition by governmental agencies of the fact that the unprotected public was being exploited by such methods. The first warning and one of tremendous significance was the indictment by the Department of Justice of two manufacturing optical agencies and

of a considerable number of ophthalmologists who participated in a plan which took hundreds of thousands of dollars from unknowing patients. A full report appeared in *The Journal of the American Medical Association* when the Department of Justice took this action during 1946. A popular periodical with millions of circulation has called on the medical profession to cleanse itself as it has repeatedly cleaned its own house in the past. The house of delegates asked the secretary of the American Medical Association to call the situation to the attention of every state and county medical society in the nation and to urge on these societies the initiation of the necessary steps towards ridding medical practice of these parasites. The Better Business Bureaus in several large communities, notably Los Angeles, have begun a campaign of enlightenment of the public regarding the

extent to which these abuses prevail in their communities; they too have called on the medical profession to take the necessary steps to stop this pernicious practice.

The housecleaning has been too long delayed. Biology has proved that any living organism that tries to maintain itself in the presence of filth invariably dies. The board of trustees of the American Medical Association therefore calls on leaders of the medical profession in every community in which the association is represented to act promptly, remembering, however, the necessity for proceeding in due form by the filing of formal charges against physicians known to be participating in such methods, thus offering an opportunity for the presentation of evidence and a suitable hearing so that the innocent may not be harmed but the guilty may be properly exposed and punished.

HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Wednesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

From the Executive Secretary's Office

You're the Doctor!

There are writers and students of medical economics who say that the American Medical Association leadership is not left-of-center; there are others who go farther than that in their statements. Assuming then that the position of the American Medical Association on proposed federal legislation is not radical it should be a safe one for study by the members of the Maine Medical Association.

That position has been most recently revealed officially at the Committee hearings on the Taft Bill, S. 545. In its major aspect the Taft Bill proposes an appropriation of 200 million dollars annually to be turned over to the states as grants-in-aid to a medical care program. Each state would set up its own program, raise funds by local taxation, and have added thereto its proportionate part of federal funds mentioned above. Such moneys are to be used chiefly for the purpose of furnishing adequate medical care to the indigent, and the medically indigent. Specific authority is granted by the Taft Bill for the use of this money to pay premiums to non-profit prepayment medical care plans.

While criticizing some of the details of this bill, representatives of the American Medical Association appeared at the hearings before the Senate Sub-Committee on Health and gave approval of its general principles.

In testifying on the Taft Bill, these representatives of organized medicine were naturally drawn into a discussion of the Murray Bill. This is the bill to provide federal compulsory sickness insurance on a comprehensive scale, and, of course, it met opposition from these witnesses. Their most potent objection is that even if the Murray Bill were passed immediately, the payroll tax imposed, and the several billions of dollars raised, there are not sufficient doctors, dentists, nurses, technicians, nor hospital beds to furnish the care promised by the bill. It is urged that a generation at least would be needed to provide the personnel and the

facilities now lacking. Further, that such a novel, unprecedented and sweeping measure as the Murray Bill, so untried and utterly different from our present system of medical care would pose insuperable administrative problems and result in vast expenditures for a definitely inferior grade of medical care.

We have arrived now at a point where we have to face the facts of life and answer one question, "Yes" or "No". That question is this:—"Under the present system is there an unequal distribution of medical care so that a considerable number of people who need it do not get it?" If the answer is "No" then legislation of any sort is an impertinence; if the answer is "Yes", even a qualified "Yes", then it is proper to discuss the best way to remedy the situation. In supporting the Taft Bill, the American Medical Association is discussing the best method of furnishing more complete medical care.

The Taft Bill, with its grants-in-aid to states, would begin with a survey in each state to determine what the medical needs are, a diagnosis, if you please. With the diagnosis made, then each state would develop its own plan, or treatment, and would receive Federal aid to supply and administer it. There would be variations in these plans and analysis of results would indicate which were most successful. This is the type of experimentation, trial and error which the American Medical Association desires in place of the Murray plan.

If this method is to be adopted it can succeed only with the coöperation and leadership of the doctors themselves.

Recall for a moment the argument that lack of trained personnel and facilities would prevent the operation of the Murray Bill if enacted now. If not enacted now, that argument will not be valid in five or ten years because it will be said bluntly "Organized medicine controls the education of doctors of medicine. What

have you done to cure the lack you spoke of in 1947?"

Education of an increasing number of first class doctors, dentists and other trained personnel is not the work of a moment. Medical schools now operating on funds from endowments are suffering from diminished income which might well result eventually in either higher tuition fees or a lesser number of medical students. State-supported schools where, as in all medical schools, the education is furnished at a fraction of its costs, have to compete with an increasing number of worthy projects for a share of tax funds and will tend more and more to restrict students to those resident in that state. The cost to the student in time and money is almost prohibitive except to the children of fortunate families.

Here then are some of the problems which the American Medical Association is asking, in your name and on your behalf, that you doctors, by your leadership, be allowed to solve:—

To maintain the present high standards of medical education and to raise them progressively as the science of medicine progresses.

In addition to this, at those same standards, to educate an increasing number of doc-

tors as the expansion of medical care makes such increase necessary.

To guide the expansion of hospital facilities and accommodations so that the hospital needs of the communities will be well served and so that civic pride or politics will not spend money uselessly to build municipal white elephants.

To develop by experiment voluntary procedures for the expansion of medical care to those now medically underprivileged.

The American Medical Association says that it is a democratic organization. A democratic organization can go forward with its work only when the majority of its constituents will it to do so.

In any case, the comparatively few officers of the American Medical Association cannot find a solution of these problems, alone. They are promising, that leadership by doctors at the community and state level will develop plans and experiments from which, by trial and error, and trial again, the highest grade of medical care for all the people will eventually be established.

You're the Doctor!

W. MAYO PAYSON,
Executive Secretary.

Clinical Pathological Exercise—Continued from page 37

Dr. John Titherington: Well, I think I'd bet on the endometriosis first. I think cervical stenosis is close too, but as has been said, nobody would do a laparotomy for a cervical stenosis.

Dr. Ferguson: Operative note: A left tubo-ovarian mass was freed with difficulty and the uterus, with cervix and left tube and ovary,

were removed. The right ovary did not appear involved and was not removed because of the youth of the patient.

Pathology report: Showed a leiomyoma of the uterus, measuring 8.0 cm. in diameter, and the left tubo-ovarian mass was shown microscopically to be due to endometriosis.

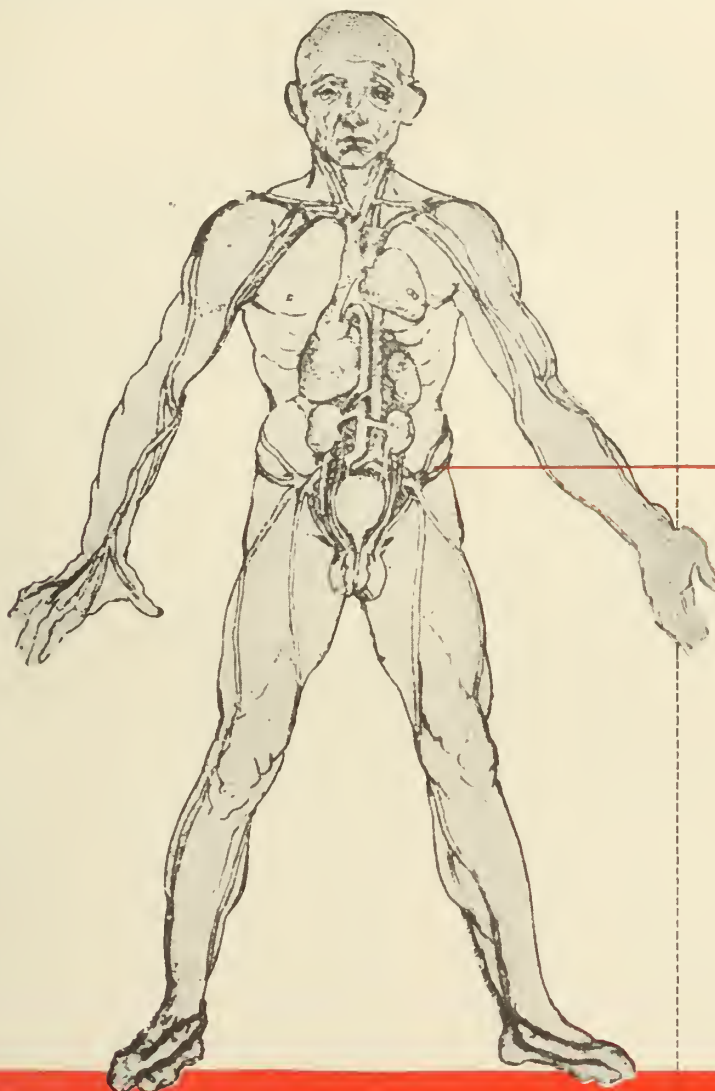
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Anatomic drawing by
Leonardo da Vinci—
Courtesy, The Bettmann Archive.

Leonardo da Vinci (1452-1519)

was well ahead of his time, for physicians of his day knew little of the function of the heart or the treatment of its diseases, although da Vinci's knowledge of such anatomy was extensive.

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SEARLE

RESEARCH
IN THE SERVICE
OF MEDICINE

*Forty Years of Practice**

The afternoon train from Augusta on July 13, 1905, brought to Union Station one young lady among the passengers who had every reason for being pleased at her return to the city of her adoption. She was tired probably. It had been hot in Augusta the past two days and the examinations had not been easy. But she must have been happy, although tired, as she reviewed the events of the 12th and 13th. She must have felt sure that she "hit" anatomy all right—Pathology and Bacteriology all right too, yes, and Obstetrics and Gynecology and certainly Medical jurisprudence she "hit" for a bull's eye; perhaps Hygiene worried her a little, possibly Practice of Medicine and Surgery—but, on the other hand, Chemistry and Materia Medica and Therapeutics was "right down her alley." We have a feeling that she slept well the night of the 13th and appeared bright and fresh behind her orderly desk in her new office at 85 Emery Street, ready for the first patient. And she has been ready for the next patient for the last forty years. Now she sits in our midst, as our guest of honour—known and beloved by us all as Doctor Lucinda Hatch.

Dr. Hatch had an unusually good background for her life work. Born in the historic and beautiful town of Castine, the daughter of Mark Phillips Hatch and Lucie Abbie Shaw, she grew up in the healthy, vigorous atmosphere of Penobscot Bay. Dr. Spalding, in his *Maine Physicians of 1820*, tells us that Dr. Joseph Stevens practiced in Castine way down into our own time, dying there in vigorous old age in 1879—well over 88, a fine old man in medicine in every respect. Young Lucinda Hatch, however, in 1879, was not old enough to take over the good doctor's practice, so she continued in High School to the graduation day. Then she enrolled in the Castine Normal School.

The profession of teaching was open to young ladies at that time and not many other professions. The profession of nursing, however, shortly after the Geneva Conference became a matter of serious consideration in

America. Through the tireless efforts of inspired leaders like Marie Zakzewska, Elizabeth Blackwell of England, Clara Barton, Louise Lee Schuyler, training schools for nurses were established in our country—namely at Bellevue, New Haven, and Massachusetts General Hospital. In 1884, Dr. Charles O. Hunt in his report to the Directors of the Maine General Hospital spoke as follows: "I wish at this time to submit for consideration the advisability of establishing in the Hospital a training school for nurses." The next year Nathan Webb, President of the Board of Directors included in his report the following statement: "During the past year the training school for nurses has been opened. The Directors deem it a matter of congratulation that this school has been initiated under so favorable circumstances and has attracted so many capable and intelligent applicants for admission to its privileges and training." Thus, under the unwearied exertions of Mrs. Alida M. D. Leese, was the Maine General Hospital training school for nurses inaugurated. An advertisement was inserted in several newspapers of Portland, Lewiston, Augusta, and Bangor, stating the intention to furnish such instruction. Allow the essayist to assume that one of these papers was delivered to the home of the Hatch family in Castine. At any rate in 1891 young Lucinda Hatch was accepted as a candidate in the Maine General training school. And one of the members of this Portland Medical club who was a house pupil about that time reports that Nurse Hatch always appeared to be well prepared and a leader in her class—The hours were long, the duties were manifold, one among these was "the application of leeches and subsequent treatment. At the end of two years eight nurses received diplomas after having passed satisfactory examinations. Perhaps the list will recall for our guest of honour incidents of those busy days. Here follows the names of those who graduated: Linna E. Gibbs, Orland, Maine; Ella M. Shepherd, Machias, Maine; Amy E. Waterhouse, Poland, Maine; Alice M. Cobb, Bath, Maine; Lucinda B. Hatch, Castine, Maine; Julia G. Hill, Dover, New Hampshire;

* Read at Annual Meeting of Portland Medical Club, December, 1946.

Mary E. Rowe, West Pembroke, Maine; Mary I. Christian, Bangor, Maine. Where were the Portland girls?

In the year 1893, the year in which Dr. Hatch graduated, Miss Amelia L. Smith was appointed Lady Superintendent of Nurses. That name may recall various events to some older members of the club.

Now Miss Hatch was a qualified member of the nursing profession and it is reported that Drs. Stephen Weeks, Seth Gordon, Lewis W. Pendleton, Alfred King, and John F. Thompson, the attending surgeons, and William L. Dana, George H. Cummings, Henry Brock, the adjunct surgeons, together with Israel T. Dana, Augustus Thayer, Charles Ring, and Henry H. Hunt, the Medical Staff, were delighted to have her take care of their patients. It is furthermore reliably reported that Miss Hatch became the favorite nurse for the families of the Directors of the Hospital. Indeed, it is recorded that she became ensconced as nurse in the home of a former President of the Corporation until she decided to study Medicine. As has been said professional training for women outside the profession of teaching was not available in those days, and medical training for women was not encouraged in many quarters. But our colleague was not discouraged. She had her High School diploma, her training in the Castine Normal School and now her certificate of attainment from the Nurses Training School together with her experience in the field of practice. Therefore, with her cheerful smile and quiet determination she matriculated at the Women's Medical School of Pennsylvania in Philadelphia—a school which pioneered in the education of women for the medical profession. It was established in 1850 and was the alma mater for many of the leading women doctors. From this fine old school then in 1905 was graduated Lucinda B. Hatch, born in Castine, but an adopted daughter of Portland. If graduation was in June, 1905, it was not long before the Board examinations in July at Augusta, Maine. And there was our newly crowned doctor ready for the test. The tests were met with honor and the records show that our contestant did hit Anatomy for 95—Pathology and Bacteriology for 95, and Medical Jurisprudence for 100—Indices, perforce, for a successful career.

Now we come to the new office at 85 Emery

Street and the signs of practice. These were good days—Teddy Roosevelt was in the White House surrounded by a rock-ribbed Republican Cabinet and Congress. Melvin Fuller from Bowdoin was Chief Justice of the Supreme Court. Andrew Carnegie was giving away millions and Henry Ford was just around the corner with his Model T. Raymond Hitchcock's light opera cavorted on the American stage. Chauncey Alcott was singing "When Irish Eyes are Smiling" and John McCormick was bringing tears with Mother MacCree — "Honey Fitz" was rendering "Sweet Adeline" on happy occasions. The youngsters were singing "Under the Old Apple Tree," and George M. Cohan was whooping it up with "Yankee Doodle Dandy," and "You're a Grand Old Flag." Indeed, America was coming of age. It was a grand place to live in—good five cent cigars could be found everywhere and lobsters were a nickel a piece. Budweiser had just introduced "The King of Beers." Ladies split straw hats and hats with birds were something to behold. Marie Dressler, May Irwin, Nora Bayes were entertaining with "Heaven Will Protect the Working Girl," "When Yo Ain't Got No Money You Needn't Come Around," and "Down Where the Wurtzberger Flows." John Drew, Otis Skinner, and Ruth St. Denis were starring in those days. People were at peace and America was having a good time growing up—and Portland was growing up with the rest of the country. A Baxter was mayor of the city and business was good in general. The people were glad to welcome a woman doctor; a doctor highly recommended by the successful practitioners of the community. Indeed, the older men on the hospital staff said that the new doctor did not need any internship at the hospital because she had served there with satisfaction and distinction from 1891 through 1893 as a nurse. Therefore, the apartment house at the corner of Emery and Spring Streets became the abiding place for our guest under auspicious circumstances. There she carried on her practice until she moved on to the Doctors' street at 27 Deering in 1912. The years 1905 to 1914 were about the end of the horse and buggy days, and the question "Did Dr. Hatch make her calls with a horse and buggy?" remains unanswered in the essayist's mind. Dr. Pingree thought vaguely yes, Drs.

Tobie, Bradford, and Emery thought not. Mr. Maurice Dunn who conducted for many years a provision and meat market at Emery and Spruce Streets couldn't say yes or no. But he referred the writer to Mr. Fred Hamilton who worked at the market and as he said, has been around quite a while. Mr. Hamilton was pretty sure that Dr. Hatch made the calls on foot; and by horse car; he couldn't remember any horse and buggy. Strangely enough the speaker has a vague notion that he has seen Dr. Hatch alighting from a covered phantom and hitching a horse—must have been a dream—The bulk of evidence to this minute seems to be against it. Perhaps our guest will feel inclined to give the members of the club an answer. That she did get around in a satisfactory manner is well supported. Patients came to consult her and the medical work increased.

It was the beginning and developmental stage of modern medicine. Lister was still alive to witness the good results of his long and up-hill struggle against "hospital gangrene." Osler had just left Johns Hopkins to accept the Regius Professorship at Oxford. MacBurney was in New York. Hare-DaCosta and Mitchell were busy in Philadelphia. Halstead, Kelly, and Welch at Johns Hopkins—In 1906, Harvard Medical School acquired a magnificent set of new buddings — Rotch, Schattuck, Maurice, Richardson were active there. Erlich was expounding his "side-chain" theory and Carel was pushing experiments in vascular surgery while Cushing was exploring new fields in the brain. New methods were being adopted and a doctor starting a practice at that period could see a wider and wider field of service ahead. During these exciting days Dr. Hatch was called upon by more and more and better and better patient.

In 1907, Dr. Hatch was appointed Attending Physician to the Temporary Home. Over a period of twenty-three years she took care of the women and children who came to this benevolent institution for help. During these many years Dr. Hatch delivered into the world at the Temporary Home with quiet efficiency 498 babies and took care of both mother and infant. And let it be borne in mind that she did not have any interne to watch over the progress and call when all was ready. Neither did she have a resident to give aid during the deliveries and stand by during the long watches of the

night. She had her own two hands, her own learned mind, and her own tireless energy. And not once did she stand alone and take full charge, but for 498 times. Perhaps younger men will ponder on that record and conclude that their lot is not too hard at present. And there never was an outbreak of epidemic disease of any kind during this regime. There must have been many cold night rides to Powsland Street and many anxious days. The hundreds of mothers and babies widely scattered over this land must feel a deep sense of appreciation for the skillful care given them by "our good doctor." The Board of Directors of the Home cherish the memory of the devoted service for so many years.

And the medical profession of the community are proud of the sterling record. This record of service at the home stands out as a shining monument to the stalwart "little doctor who always answered present when called upon." During her active professional life Dr. Hatch has given generously to many causes. For years she had charge of the Health Education Committee of the local Y. W. C. A. and examined countless young ladies who wanted to participate in the athletic activities of the organization. At the Boys' Club she likewise spent many hours examining applicants for admission to the swimming activities of the club. She has been a helpful member of our medical clubs and a regular attendant and has served as President of the Cumberland County Medical Association. In the civic life of the community she has taken her post and borne her share of the load.

Since 1921 Dr. Hatch has been a member of the Altrusa International, the strong women's Service Club. She was, in fact, one of the Charter members and has served as President of the Club. Her church affiliation has been with The First Parish Unitarian Church.

Now after 40 years of Practice she honours us with her presence here tonight. She could have driven down in her automobile but it is more than likely that she walked down without the aid of any canes or crutches. We are delighted to have her with us. We are proud of her achievements and admire her serene countenance and wish for her many years of contented and joyous life.

Necrologies



*Harold Ashton Pingree, M. D.
January 16, 1877 - January 7, 1948*

The subject of this sketch was a native of Portland, Maine, as were also his parents, Malcolm C. Pingree, M. D., and Cora L. Dodge. His early education was obtained in the public schools of Cape Elizabeth and Portland. Then followed the completion of his course at the Portland High School (1894) and his graduation from the Bowdoin Medical School in 1901.

Having been assured by his father that he could never succeed in medicine in Portland, he betook himself reluctantly to Stonington, Maine, where the scenery was beautiful but the prospects for medical progress poor, he thought, and so, against parental admonition, he retraced his steps to Portland and began, almost at once, a one year's internship at the Maine General Hospital (1902-1903). During that year his outstanding mechanical ability forced itself upon the attention of Doctor Edville Abbott who was pioneering in orthopedics about that time and the older man prevailed upon the younger to join him in his pioneer work (1903). By hard study and very close application to his new task he forged ahead rapidly, holding in due course the position of Assistant Orthopedic

Surgeon at the Maine General Hospital (1905-1914), Associate Orthopedic Surgeon at the Children's Hospital (1908-1933), Associate at the Maine General (1928-1933), Chief of the Service there (1933-1943) and Chief of Service at the Children's Hospital (1933-1947). Although these services made great demands on his time and strength—he was always most conscientious and excessively careful of small details in the treatment of rich and poor alike—he still was able and willing to act as Instructor in Orthopedic Surgery in the Bowdoin Medical School from 1905 to 1922.

I had known Doctor Pingree intimately for forty years and to his dying day had great admiration for him for his traits of honesty, kindness and loyalty. He could and did display a little righteous indignation at times but, in the main, he had cultivated the gift of taciturnity and learned to consume his own smoke. While he blustered occasionally, the profession took these outbursts good-naturedly, knowing that underneath it all was a vast deal of the old-fashioned courtesy which hesitates to wound the feelings of a fellow practitioner. Although absorbed in his work he was

not one of "the bovine brethren who think of nothing but the treadmill and the corn." His knowledge of history and literature and of the Bible often amazed me. He was absolutely without pretense. When the late Doctor Will C. Macfarlane, Portland's municipal organist, asked him why he never went to one of his concerts, he replied very frankly, "I don't know anything about that belly-ache music of Bach and Widor. If you'll agree to play the Swance River I'll come." Again, while he and I were in Europe in 1910, we visited the Dresden Art Gallery for the express purpose, as I supposed, of seeing Raphael's Sistine Madonna. I looked at the Madonna, not because I was an art connoisseur, but because I had been told that here was one of the ten greatest paintings in the world. When I turned to comment to my friend whom I supposed was somewhere near me, I discovered him out in the larger gallery, gazing rapturously at a painting of a pheasant, an orange, a lemon and some celery on a table. His only remark was, "aren't those objects natural?" He probably never pretended to like anything because it was supposed to be a mark of sophistication to like it. In Munich he refused to touch a drop of Munich beer because it contained some alcohol and alcohol had ruined some of his ancestors, so he said. Throughout his life he never touched alcoholic beverages or offered them to anyone else. "Aside from its use in the arts and sciences I don't know of one good word that can be said for alcohol," he often said to me, and I agreed with him.

It has been a rare privilege in my life to have been long and intimately associated with a man who either consciously or otherwise set for himself the "Task" suggested by Robert Louis Stevenson,—*"To be honest, to be kind, to earn a little and to spend a little less; to make upon the whole a family happier for his presence. To renounce when that shall be necessary and not be embittered. To keep a few friends, but these without capitulation—above all, on the same condition to keep friends with himself—here is a task for all that a man has of fortitude and delicacy."*

While Doctor Pingree had a marvellous sense of humor and an extraordinary facility for original speech, he had a very serious side to his nature. His heart and soul were in the Children's Hospital to which, in association with the late Doctor Abbott, he had given the best of his active life and ability to develop into a charitable institution for crippled children.

Doctor Abbott had told Doctor Pingree and me

that, when he should have died, his estate would go to the Children's Hospital in trust, the income to be enjoyed by the hospital so long as it did not merge with any other institution. It was, therefore, a profound disappointment to us both, but particularly to Doctor Pingree, to learn, when the will was published, that not one cent had been left to his pet project. This rankled long in his bosom. About seven years ago, also, he suffered a coronary accident from which he seemed to have recovered well. But there were other bruises in store for him. He and I had had offices in the same building for twenty-six years and we had hoped to spend our remaining days of practice there. However, the fates decreed otherwise. In order to effect certain economies in management, our proprietors decided to close the switchboard on December thirty-one which rendered the place useless for us and forced us to seek new quarters which we did in the Columbia Hotel. This experience for two men of seventy did not contribute to serenity of mind for Doctor Pingree. At the same time it was announced in the press that the directors of *his* hospital, the Children's, were contemplating merging with the Maine General Hospital. This was the series of events in the life of this devoted doctor that preceded the tragic happening on January seven. Rightly or wrongly, but from conviction, he had opposed the merger, and on the fatal Wednesday (January seven), he accepted an invitation to meet the Hospital Corporation at noon in the Hospital. Here, I am told, he reiterated his views on the proposed merger, calmly and without rancor, and returned to the lobby of the Columbia Hotel.

When the famous John Hunter addressed the directors of St. George's Hospital in London on behalf of certain pupils who desired to enter, and one of his colleagues flatly contradicted something he said, angina seized him, he retired into an adjoining room and fell dead in the arms of a Dr. Robertson.

So it was with our good doctor. He had spoken, as he thought, in the best interest of crippled children. The board had thanked him for his devotion and loyalty to the institution but had definitely decided to merge. He went back to the hotel, sat down in the lobby and died within five minutes.

Doctor Pingree never married. He is survived by his sister, Mrs. Sewall W. Percy and a niece, Miss Anne Percy of Portland; also by another niece, Mrs. Arthur Hawkes of Cape Elizabeth, Maine.

E. W. GEHRING, M. D.

Lester P. Gerrish, M. D., 1875-1947

After a few days illness, Doctor Lester P. Gerrish died November 12, 1947, at his home in Lisbon Falls, Maine, where he had practiced for forty years.

Born in Lisbon, November 21, 1875, the son of

Everett M. and Georgia (Pierpont) Gerrish, he attended the public schools and graduated from Bates College in 1896. Following this he was principal of High Schools in Lisbon and South Paris until 1900,

when he entered Harvard Medical School and obtained his degree in 1904. He interned in Boston City Hospital in 1906.

While in college, and later, he was outstanding as a catcher and batsman on semi-pro baseball teams.

Doctor Gerrish was a member of the Masonic Fraternity and of the Odd Fellows. He was a member of the Androscoggin County Medical Society, the Maine Medical Association, and the American Medical Association. He was President of the State Association in 1926 and of the County Association in 1935 and 1936. In 1924 and 1929, he was delegate from the Maine Medical Association to the American Medical Association. He represented Lisbon in the Legislature

of 1921 and from 1921 to 1926 was chairman of the Legislative Committee of the State Association. He had been President of the local Board of Trade.

Besides his widow, Anna (Howard) Gerrish, he is survived by three sons, Everett P. and Harold A. of Los Angeles, California, Howard H. of Algonac, Michigan, and three grandchildren.

Doctor Gerrish was highly esteemed, both as a physician and a citizen, not only by his patients but by all who knew him. His interest in both medical and public affairs continued to the end and his passing is mourned by the whole community in which he had served so long.

Sarah Lincoln Hunter, M. D., 1857-1947

Sarah Lincoln Hunter was the oldest daughter of Dr. Samuel Belcher Hunter and Amelia Lincoln Hunter. She was born in Steuben, Washington County, Maine, on July 3, 1857. Her father was a surgeon in the Union Army. Soon after he left the service he resumed the practice of medicine in Machias and East Machias, Maine, making his permanent home in Machias. After graduating from Machias High School, Miss Hunter taught several terms of district school most successfully. She then entered Mt. Holyoke Seminary and spent two years there, majoring in science, as she already wished to follow in her father's footsteps as a physician.

Entering The Women's Medical College in Philadelphia she was graduated in the class of 1891, and returning to the family home in Machias began to practice, partly as assistant to her father and partly independently. After her father's death in 1912, she continued to practice, specializing more particularly with women and children. As the pioneer woman physician in Washington County she was often sought

for advice, treatment, and consultation, until at the age of eighty she took down her sign. She did much speaking about the county in the anti-tuberculosis campaign, and was long a member of the Washington County Medical Association.

In the sickroom she was vigorous and helpful, knowing how to make the most of the limited facilities of the isolated farmhouses where she was often sought. She was physician in charge at the birth of many babies, and gave good practical advice on infant care. She made many friends who still recall her helpful suggestions and care with satisfaction.

At eighty-five Dr. Hunter was unfortunate in breaking her hip, but under her own directions in the hospital she made an excellent recovery. Much of her later life was spent with her sister, Mrs. Clarence H. Knowlton, in Hingham, Mass. Here she passed away on August 14, 1947, at the advanced age of ninety. She was buried beside her parents in the family lot at Farmington, Maine.

CLARENCE HINCKLEY KNOWLTON.

Percy E. Gilbert, M. D., 1876-1947

Percy E. Gilbert, M. D., 71, of Madison, Maine, died November 1, 1947.

He was born January 9, 1876. He was graduated from Coburn Classical Institute in 1895, Colby College in 1900, and received his medical degree from Bowdoin Medical School in 1906. He interned at the Maine General Hospital in Portland.

Doctor Gilbert practiced in Linneus, Maine, from

1907 to 1913, in Ashland, Maine, from 1913 to 1923, and in Madison from 1923 to the time of his death. He served on the staffs of the Presque Isle General Hospital, the Sisters Hospital, Waterville, and the Franklin County Memorial Hospital, Farmington.

He was a member of the Somerset County Medical Society, the Maine Medical Association, and the American Medical Association.

MA 1949

County Society Notes

COUNTY SOCIETIES

Androscoggin

President, Michael J. Harkins, M. D., Lewiston
Secretary, Glidden L. Brooks, M. D., Lewiston

Aroostook

President, Gerald H. Donahue, M. D., Presque Isle
Secretary, Clyde I. Swett, M. D., Island Falls

Cumberland

President, Edward A. Greco, M. D., Portland
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President, Maynard B. Colley, M. D., Wilton
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President, William L. Gousse, M. D., Fairfield
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Oxford

President, Willard H. Boynton, M. D., Bethel
Secretary, Dexter E. Elsemore, M. D., Dixfield

Penobscot

President, Edward L. Herlihy, M. D., Bangor
Secretary, John E. Smith, M. D., Bangor

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Secretary, H. Carl Amrein, M. D., Madison

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Washington

President, John F. Hanson, M. D., Machias
Secretary, John Young, M. D., Jonesport

York

President, Paul S. Hill, Jr., M. D., Saco
Secretary, C. W. Kinghorn, M. D., Kittery

100% Paid Membership for 1948

Piscataquis County Medical Society

Hancock

A meeting of the Hancock County Medical Society was held at the Hancock House, Ellsworth, Maine, January 14, 1948. There were 14 members present.

The meeting was called to order by Dr. M. A. Torrey, President. The Minutes of the previous meeting were read and approved. It was voted that a "Ladies Night" be instituted in the near future. It was voted that the program committee be empowered to spend \$50.00 for procurement of speakers.

Herbert T. Wilbur, M. D., of Southwest Harbor, read a paper concerning a case of Hydatid Mole.

Clarence Emery, M. D., of Bangor, spoke to the society on "Prenatal Care and the Rh Factor."

ROBERT H. DELAFIELD, M. D.,
Secretary.

Kennebec

The annual meeting of the Kennebec County Medical Association started at 6.30 P. M., December 18, 1947, with the customarily good dinner at the State Hospital, Augusta, Maine.

President Bull opened the business meeting at 7.30 with an attendance of 55. The records of the previous meeting were approved, and Dr. Ernest O. Friedlander of the Veterans' Administration, Togus, was elected to membership.

W. Mayo Payson, Executive Secretary of the Maine Medical Association, talked on the national medico-political situation and the trend to a prepaid medical care plan.

The annual reports of the Secretary-Treasurer were read and approved.

Dr. Frederick T. Hill, Chairman of the Nominating Committee, reported for the committee, and the following officers were elected for 1948:

President, William L. Gousse, M. D., Fairfield.

Vice President, Harold E. Small, M. D., Augusta.

Secretary-Treasurer, Arch H. Morrell, M. D., Augusta.

Councilors: Charles E. Towne, M. D. (1948), Allan C. Hurd, M. D. (1949), Francis H. Sleeper, M. D. (1950).

Delegates to the Maine Medical Association: Thomas C. McCoy, M. D., Waterville (1948), Theodore E. Hardy, M. D., Waterville (1949), Leon D. Herring, M. D., Winthrop (1949), Frank B. Bull, M. D., Gardiner (1949). Alternates (for one year): John O. Piper, M. D., Waterville; Roland L. McKay, M. D., Augusta; Wilson H. McWethy, M. D., Augusta; and Arch H. Morrell, M. D., Augusta.

Then in conjunction with the Maine Psychiatric Society we heard a talk by Elvin V. Semrad, M. D., of the Boston State Hospital, on "Psychiatric Aspects of Essential Hypertension."

The psychiatrists role in Psychosomatic practice was discussed especially in relation to "Essential Hypertension." Comments dealt with the anatomic-psycho-

logical basis of emotional expression, the interpersonal relationship factors, personality factors and briefly, aids to therapeutic management. The characteristic features of the "hypertensive personality" were reviewed. He displays excessive autonomic responses to minor emotional stimuli and may exhibit a sanguine or choleric temperament. There are many exceptions. In some the personality deficits are noted after the hypertensive state manifests or after cerebral vascular changes associated with it become clinically evident. The psychodynamic aspects of hostility in these cases was pointed out.

A. H. MORRELL, M. D.,
Secretary.

Lincoln-Sagadahoc

The Lincoln-Sagadahoc Medical Society met in Bath, Maine, December 8, 1947. After a social hour at the home of Ex-Governor Sumner Sewall, dinner was served at the Hyde Mansion—Home of The Pine Tree Society for Crippled Children—and the members inspected the facilities.

Dr. Leo McDermott, of Portland, spoke on "Spastic Paralysis in Children," and Dr. Irving I. Goodof, of Lewiston, spoke briefly on "Poliomyelitis."

ROBERT W. BELKNAP, M. D.

Penobscot

A meeting of the Penobscot County Medical Society was held on January 20, 1948, at the Bangor House, Bangor, Maine.

Dr. Lewis Dexter, of the Staff of the Peter Bent Brigham Hospital, Boston, was the speaker of the evening. His subject was "Venous Catheterization as an Aid in Cardiac Diagnosis."

The subject of a fee schedule was discussed and the difficulties of such standardization were emphasized. It was felt that the committee should continue on this work with the aid of the different specialists groups.

J. E. SMITH, M. D.,
Secretary.

York

The Annual Meeting of the York County Medical Society was held on Wednesday, January 14, 1948, at the Kennebunk Inn, Kennebunk, Maine.

The following officers were elected for 1948:

President, Paul S. Hill, Jr., M. D., Saco.

Vice President, J. Robert Downing, M. D., Kennebunk.

Secretary-Treasurer, Charles W. Kinghorn, M. D., Kittery.

Board of Censors: Gerald R. Smith, M. D., Saco (1948), H. Danforth Ross, M. D., Sanford (1949), and William T. Roussin, M. D., Biddeford (1950).

Delegates to the Maine Medical Association: James H. Macdonald, M. D., Kennebunk; Carl E. Richards, M. D., Sanford; and Dr. Charles W. Kinghorn, M. D., Kittery. Alternates: Oscar W. Perrault, M. D., Biddeford; William F. Mahaney, M. D., Saco; and Edward W. Holland, M. D., Sanford.

Drs. H. D. Ross, C. E. Richards, and E. W. Holland were appointed a committee to bring in a resolution, at the April meeting, to change State Society by-laws so that no dues would be required from members after a certain age.

Dr. Stephen A. Cobb, President of the Maine Medical Association, introduced the speakers; Herbert E. Locke, Esq., and W. Mayo Payson, Esq.

Mr. Payson outlined his work as Executive Secretary of the State Association.

Mr. Locke, Legal Counsel for the State Association, spoke on Malpractice, and answered questions at some length.

There were 22 members and three guests present.

C. W. KINGHORN, M. D.,
Secretary.

New Members

Kennebec

Ernest O. Friedlander, M. D., Togus, Maine.

Penobscot

Karl V. Anderson, M. D., Pittsfield, Maine.

Donald Coulton, M. D., Bangor, Maine.

Clement S. Dwyer, M. D., Bangor, Maine.

Wilbur B. Manter, M. D., Bangor, Maine.

Urban Merrill, M. D., Newport, Maine.

John R. Sullivan, M. D., Millinocket, Maine.

Lyman O. Warren, M. D., Brewer, Maine.

Washington

Charles W. Capron, Jr., M. D., Calais, Maine.

Transferred

Joseph A. Gelinas, M. D., Van Buren, Maine.

From: Washington County Medical Society.

To: Aroostook County Medical Society.

News and Notes

American Academy of Pediatrics

The Areal Meeting of the American Academy of Pediatrics will be held at the Hotel Statler, Buffalo, New York, April 29th to May 2nd, 1948.

Members of State Medical Societies are welcome to attend. The registration fee will be \$5.00 for such non-members. This is in addition to the regular \$5.00 registration fee for members making a total of \$10.00 for

non-members of the Academy. This registration fee includes a ticket to the banquet.

Registration may be made ahead of time by writing to Dr. C. G. Grulee, Secretary-Treasurer, American Academy of Pediatrics, 636 Church Street, Evanston, Illinois, enclosing a check for \$10.00 or registration may be at the time of the meeting.



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Some Medical Aspects of Geriatrics

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Geriatrics is concerned with the process of aging, the diagnosis and treatment of diseases of the elderly and the aged. This is a large and ever increasing group. 6.8% of our population is over 65 years of age, an increase of 2.8% since 1900; the percentage of the population 45 years of age or older has increased from 18% to 27% in the same period. It is computed that in another thirty years there will be well over 20,000,000 persons in the United States who are 65 or over.

The average expectancy of life has increased 10 years since the turn of the century and now stands at 60 years, which is still 10 years short of the biblical three score years and ten. The mean length of life at the time the Declaration of Independence was written was 35.5 years. The extended life span has been due largely to the reduction of infant mortality and the control of infectious diseases. Thus far the medical profession has been able to accomplish little toward increasing the longevity of those who are already old, a challenge which we must accept. Indeed the proper application of the knowledge we have could well extend the average life span by another fifteen years.

Sixty per cent of deaths now occur in per-

sons over 45 years of age. We have to treat more and more older people with chronic disease. Their ailments fall into all the special fields of medicine except pediatrics and obstetrics. To properly care for these older patients requires judgement, tact, and infinite patience.

Senescence is as much a part of life as birth, growth, death. Just why we grow old and die is a deep biochemical secret whose heavy curtain we cannot pass. Is it the end result of external insults, or the punishment we wilfully inflict on our bodies? Or is it the gradual extinction of the vital spark with which the fertilized ovum was imbued?

However we may theorize as to its cause, age possesses certain common and distinctive features, some of which appear in early life. Vestigial organs undergo typical age changes in infancy. The primary observations described by Winternitz in his text, "The Biology of Arteriosclerosis," were made on preparations from the ductus Botalli. Noninfected tonsils begin to atrophy soon after puberty. Professional athletes disappear from the ring, the baseball and football roster in the middle thirties, when man has reached the peak of his physical strength and, at first imperceptibly,

begins to descend the far slope. The hair grows gray and sparse. The integument loses its elasticity and starts to wrinkle. The gums recede and the teeth become loosened. The lenses grow inelastic and the individual presbyopic. The metabolism falls, by as much as 25% in the very elderly. Muscular coordination and the sense of balance are impaired. There is strength enough for simple daily needs but a diminished reserve for prolonged or sudden vigorous effort. The human body must maintain other inward constants beside the temperature; this struggle against the external environment is increasingly difficult as age advances.

The brain and the psyche do not escape the effects of aging. Memory grows less acute and learning is difficult. The mind resists change, prefers to be left to its familiar paths. It takes a philosopher to accept the progressive limitations of age. Work is still a panacea in age as in youth. Unless this man is self sufficient and has an interesting avocation, it may be best for him to continue some form of work.

Since man first recorded his thoughts and acts, the struggle between youth and age has existed. Youth sees age as hidebound, living in the past, out of date, failing to seize opportunity at the flood tide. Age watches youth as, heedless of advice, he hastens to make the same mistakes his ancestors made, unable to imagine that things which are new or different are not necessarily in the way of progress.

Two-thirds of the deaths in the elderly result from cardiovascular disease, some of them the complication of hypertension or diabetes. This process is true arteriosclerosis, not arteriolosclerosis, atherosclerosis or the thrombangiitis obliterans of earlier life. The pathology appears first in the aorta and comes to involve smaller and smaller vessels. When it can decrease the vascular lumen, symptoms appear.

Elderly patients with angina pectoris should follow a regime of living which aims to avoid prolonged or vigorous physical exertion and avoids all exertion directly after eating. Attempt is made to interest the patient in studying his own case, to discover the types of exertion or excitement which will produce attacks. He is instructed to avoid fatigue, overeating, exposure to cold. He is provided with the

smallest dose of nitroglycerin which will stop his attacks and is instructed to take the remedy at once when the pain starts. If two tablets 15 minutes apart do not relieve the pain, he is to call for help. Smoking should be reduced to a minimum or stopped. A drink of liquor when tired is often beneficial but even mild intoxication is harmful. Most patients are tried with slow acting vasodilators such as theophyllin derivatives and maintained on one of these drugs if benefit is apparent.

Older persons are particularly prone to develop shock if the pain of cardiac infarction is not quickly relieved. They tolerate morphine less well than youths and morphine frequently causes distressing emesis; perhaps Dilaudid, Pantopon or Demarol will suffice and will provoke less nausea. Oxygen is especially useful to relieve pain and to prevent its recurrence. Large doses of barbiturate derivatives often result in wild dreams or disorientation. Bed rest is necessary but after the pain has ceased, the patient may be allowed to use a commode beside the bed. The danger of propagation of the coronary thrombus with new infarction and of emboli from intramural or venous thrombosis is greatly decreased by anticoagulant therapy which requires that the patient be admitted to a hospital where reliable tests of prothrombin time are done. The prothrombin time is maintained at between 35% and 50% of normal, the doses of Dicumarol being determined by daily prothrombin time determinations. Anticoagulant therapy is continued for three or four weeks. It is stopped if bleeding occurs; a constant watch is maintained for hematuria, which may appear when the prothrombin time is above 35% of normal. It is well to have the urine saved and inspect it personally. The bleeding may be controlled by synthetic Vitamin K by vein,—transfusion soon after myocardial infarction is not advisable. Outspoken congestive failure demands the use of digitalis. The elderly patient is allowed to sit out of bed at the end of four weeks if conditions will allow. Graduated exercise is started in six weeks provided the blood sedimentation rate has become normal and the patient does not show signs of congestive failure.

An occasional elderly patient with heart failure may show the signs of rheumatic valvular

disease but coronary sclerosis is more commonly the cause. The engorged neck veins, enlarged liver and dependent edema may not be accompanied by a cardiac murmur or there may be relative mitral insufficiency or a calcified mitral or aortic valve which can be seen by fluoroscopy. The majority of these patients have auricular fibrillation. They are treated by modified bed rest, restriction of fluids and sodium, and by digitalization. 1.2 mg. of digitoxin is the average dose of digitalis needed; the daily maintenance dose is more often 0.1 mg. than 0.2 mg. Overdosage is often recognized by visual symptoms,—not colored vision but smoky vision or a flickering sensation toward the periphery of vision. If these measures do not cause the signs of congestive failure to disappear, mercurial diuretics may be used. Contrary to our former belief, old people tolerate mercurial diuretics well. The presence of intractable failure in an elderly man should suggest the possibility of urinary retention. A sudden diuresis may result in urinary retention which causes the patient great pain because of distension of the bladder.

Coronary heart disease and hypertension bring strain primarily upon the left ventricle. The frequency with which the diagnosis of heart trouble is first made in such patients only when subcutaneous edema appears makes one certain that the signs of a failing left ventricle are often overlooked. Cheyne-Stokes breathing or some other respiratory disturbance of cardiac origin is the first evidence of heart failure in such patients; they may show little or no exertional dyspnea and rales at the bases may not be evident at the time of examination. The history says that this man is regularly awakened at the same hour of night with discomfort in the chest or upper abdomen, which he calls "gas." He gets up, finds his bathrobe and slippers, goes to the kitchen to heat water and prepare a hot drink. The effort this requires raises the diastolic blood pressure above the critical level for inadequate coronary blood flow and by the time the drink is ready, he is breathing easily again. He retires and is able to sleep till morning. Such patients do poorly on barbiturate hypnotics; opiate definitely aggravates the periodic breathing. If rest and digitalis do not relieve the symptoms, 5 grain aminophyllin suppositories may give quick relief. The effect of

mercurial diuretics is less prompt but frequently helpful.

The one form of respiratory difficulty arising from a failing left ventricle which morphine will help is acute pulmonary edema. Oxygen and ovabain are also indicated; the latter must be repeated in 12 hours and may be succeeded by digitalization since strophanthin preparations are unreliable by mouth. Such an acute attack should be treated with at least two weeks of rest.

Vascular disease of the extremities causes parasthesiae and muscular rigidity with effort or painful nocturnal cramps. The feet show decreased temperature and rapid blanching on elevation above the body level and a violet color with dependency. The presence or absence of pulsation in the posterior tibial and dorsalis pedis arteries has more prognostic than diagnostic significance. A more valuable method of examination is the hyperemic flush described by Lewis. A blood pressure cuff is applied above the knee and secured in place by an ACE bandage. The cuff is inflated to 250 mm. of mercury for 4 minutes. When the pressure is suddenly released, the resulting hyperemic blush reaches the toes of normal subjects within 10 seconds. A similar test may be performed in the upper extremity by tightly clenching the fist. The circulation provided by one main artery may be observed by digital compression of the other.

Patients with peripheral vascular disease should not smoke. They should dress warmly and should avoid prolonged walking, standing and bodily fatigue. Careful foot hygiene should be observed. A flushing dose of nicotinic acid will frequently prevent painful cramps for several hours. Extracts such as Depropanex are often of some value. Buerger's postural exercises and alternate compression and constriction of the limb have helped some patients. Sympathectomy is not frequently done until other measures have failed. In arterial thrombosis, amputation is postponed if possible until demarcation is established. Refrigeration will relieve pain and may improve the circulation in the limb.

Cerebral vascular accident with hemiplegia is unmistakable and requires no comment. Apoplectic seizures of hypertensive encepho-

lopathy are the accompaniment of abrupt rises of blood pressure and often have no demonstrable residue. Alvarez and others have repeatedly described "little shocks," attacks with sudden onset, sweating, often with vomiting and abrupt increase in blood pressure. The personality of the patient or his capacity for mental work may be permanently changed following a seizure. Autopsy has shown scars of many small cerebral infarcts in such cases.

Parkinson's disease is readily recognized. Patients may be helped by scopolomine, stromonium or belladonna.

Primary pneumonias respond to chemotherapy or penicillin or both but the aged pneumonia patient should be hospitalized when possible. It may be considered wise to protect elderly patients with diabetes, heart, or kidney trouble by the injection of polysaccharide if there is a history of frequent pneumonia.

It is easy to overlook emphysema as a cause of breathlessness in the elderly and yet the diagnosis is not clinically difficult. Bronchiectasis may accompany emphysema. These two conditions may cause chronic cor pulmonale. Acute cor pulmonale, a result of moderate sized pulmonary infarction, often masquerades as coronary thrombosis. These two processes have much in common and the treatment is quite similar although the ultimate prognosis is not. Subacute cor pulmonale has been seen from diffuse pulmonary metastasis in carcinoma of the breast or the genitourinary tract; the classical picture is seen in fat embolism from fracture of a long bone and here it is complicated by cerebral symptoms which appear when fat leaks through the pulmonary capillaries and reaches the brain. Dyspnea and cough may be the presenting symptoms of several diseases. But if pain in the chest and loss of weight are added, primary carcinoma of the lung is strongly suggested. When the X-ray shows an area of atelectasis, bronchoscopy and a bronchogram are indicated.

Hiatus hernia is occasionally seen in the elderly. It is best treated by small frequent meals of a bland diet with antispasmodics and avoidance of the recumbent position after eating.

Dysphagia may result from the Plummer-Vinson syndrome in persons with macrocytic anemia. The symptoms may also be caused by

improper mastication of food by individuals with dentures. Dysphagia in older patients demands careful study to rule out carcinoma of the esophagus.

We try to be always on the watch for carcinoma of the stomach. Yet many persons with peptic ulcer live into the old age group, still subject to bouts of indigestion after dietary indiscretions. A surprising number of peptic ulcers first develop in the elderly. A man of 84 with a 10-year history of angina has subsequently developed a duodenal ulcer. Hemorrhage from ulcer is a serious matter in the aged. Older patients often follow medical treatment for ulcer faithfully and since they have less drive in their daily life, medical treatment is usually successful.

Carcinoma of the colon and rectum is also common in old age. Every patient with digestive symptoms deserves a rectal examination and many of them a proctoscopy as well. The passage of small, marble-sized lumps in the stool is characteristic of diverticulosis of the colon, the diagnosis being verified by X-ray examination. This condition is helped by a non-irritating, low residue diet, antispasmodics and avoidance of cathartics. Some of the patients will have attacks of diverticulitis which for a time may lack focal symptoms leaving fever to be explained. Diverticulitis commonly responds to expectant treatment and penicillin.

Gall bladder disease is the most common digestive disorder which afflicts the elderly. Cholelithiasis is often found at autopsy in persons who have no history to suggest the disorder. In fact gall stones are often found during life in persons who are having no symptoms and who are unwilling to consider surgery. For how long is one justified in treating medically old people with chronic heart or kidney disease and recurring gall bladder attacks? Each attack results in at least temporary damage to the liver. If surgery is postponed, the physician must assume the risk that operation may become a necessity at a time when the patient is not in the best possible condition. It may be better judgement in many cases to elect surgery unless the complicating disease is of such severity that the patient's expectancy of life is short.

Continued on page 70

The Endocrine Factors in Sterility of the Female

K. ALEXANDER LAUGHLIN, M. D., Portland, Maine

The complete dependence of reproduction on the integrity of the endocrine system is well known. An endocrine factor in the female partner is either partly or wholly responsible for about twenty-five percent of involuntary barren marriages.

Before we undertake the study and treatment of sterility, the pathology of normal endocrinology must be reviewed briefly. The estrogenic hormone produced by the growing follicle in the ovary brings about the advancing proliferative phase in the endometrium. With the rupture of the follicle, the newly formed corpus luteum, through its secretion of both estrogen and progesterone, produces a still greater endometrial development, distinguished especially by increasing evidence of the secretory response evoked by the progesterone. The corpus luteum begins to retrogress probably about twenty-four to thirty-six hours before the onset of the next menstrual bleeding. The resulting withdrawal of the ovarian hormones is believed to be the cause of the menstrual bleeding. The mechanism which brings this about is not entirely clear, but the immediate factor is to be sought in the effect of these hormones upon the vascular apparatus of the endometrium. The important studies of Daron, Markee and others have thrown much light upon this problem, indicating that the endometrial degeneration and desquamation of the bleeding phase are due to ischemia resulting from intense and prolonged vasoconstriction of the spiral arteriolis of the endometrium.

The activators of the two ovarian hormones are conditioned by the hormones found in the pituitary gland. It was not until 1926, through the work of Philip Smith, that the relationship was established. This paper is not the place to review the historical aspects of this work, but merely to state the established fact that the anterior pituitary dominates the functional activity of the ovary and that this control is exerted through two gonadotropic sex hormone principles. One of these make possible follicle maturation and thereby the follicle-ripening principle. The other, the luteinizing hormone

is responsible for luteinization and, therefore, the secretion of progesterone. Unlike the two ovarian hormones which have been isolated in crystalline form, the gonadotropic pituitary hormones have not been isolated and we know nothing as to their chemical structure.

We can say then that any deviations from the normal mechanism, such as amenorrhea, dysfunctional menometrorrhagia and anovular menstruation point definitely to disruption of the pituitary-ovarian-uterine mechanism and to a low degree of fertility even in the absence of definite stigmas of an existing endocrine disturbance.

From a standpoint of study and treatment of sterility, the endocrine factors in the female may be divided into three groups.

- (1) Abnormalities of the menstrual rhythm, namely, amenorrhea.
- (2) Anovular menstruation.
- (3) Inadequate progestin phase.

Amenorrhea:

The most common cause of amenorrhea in the etiology of sterility is a functional disturbance of the anterior pituitary gland, the well known Frochlick's Syndrome characterized by varying degrees of mons-mammary-girdle obesity, massive pelvic bones, relatively short limbs, thickset neck, genital hyperplasia, hypertrichosia, high sugar tolerance and low specific dynamic action of protein.

Amenorrhea due to an inherent lack of ovarian function is less frequently encountered than the pituitary type of malfunction. Patients of this type are usually characterized by a slim figure, superlatively feminine appearance and demeanor, visceroptosis, gastro-intestinal spasticity, dysmenorrhea, dyspareunia and other evidences of instability of the autonomic nervous system. From the standpoint of diagnosis and prognosis the recovery of 100 mouse units of the follicle-stimulating gonadotropic in twenty-four hour output of urine, brands the patient as a primary hypogonad and denotes an irreparable ovarian failure.

The uterus, usually the mirror of pituitary-ovarian function, may exhibit an acquired or congenital lack of growth response, which in itself may be the sole cause of amenorrhea and sterility.

Malfunctions of other endocrine glands, those not directly in control of menstrual function, such as the thyroid, adrenal cortex and pancreas, may be responsible for menstrual disorders and sterility. Though hypothyroidism plays an important role in the etiology of menstrual disorders, determination of the basal metabolic rate and the level of blood cholesterol is essential in every instance of sterility.

In the treatment of amenorrhea there are certain basic principles which have a general application irrespective of the endocrine or metabolic etiology; elimination of obvious foci of infection and correction of a faulty diet; desiccated thyroid in small doses is helpful even in obese patients with a normal basal metabolism.

Organotherapy with gonadotropins whether pituitary, chorionic or equine, has thus far proved disappointing in the treatment of amenorrhea. Thyroid therapy is of unquestionable value in the amenorrhea of hypothyroidism.

Anovulatory Menstruation:

The fact that menstrual periods, which are quite normal in character, amount and rhythm, may at times occur without the accompaniment of ovulation is now established without a doubt. With the widely employed diagnostic procedure of endometrial biopsy at the very beginning of a menstrual flow, in many instances this has revealed an endometrium which shows not the slightest evidence of the secretory changes commonly accepted as a criterion of corpus luteum activity and therefore of ovulation. The incidence as to the frequency of anovulatory type of bleeding is not known, but there is evidence that the anovulatory mechanism is not rare. The menstrual phenomena with the anovulatory cycle is due to the functional activity of the follicle alone, instead of the sequential action of follicle and corpus luteum which characterizes the common ovulating type of cycle. The follicles advance to maturity or, perhaps, somewhat beyond, and then instead of ruptur-

ing and extruding the ovum they undergo degeneration with cessation or sharp diminution of estrogen production.

It is this abrupt hormone deprivation which brings about bleeding after a considerable number of days, so that the rhythm of the flow, as well as its amount, may be quite like that of an ovulating woman. Like functional bleeding, it is at bottom a disorder of ovulation and must be of pituitary origin, though we know little as yet as to the immediate cause.

The endometrium in such cases shows only various degrees of proliferative activity, with no secretory changes. In some cases the growth effect of the estrogenic hormone has been carried further so that the premenstrual endometrium may show a well marked hyperplasia of the Swiss-cheese pattern such as often seen in cases of functional bleeding.

Beside the study of the endometrium for a diagnosis of anovulatory type of bleeding, we can turn to the cyclic fluctuations in the basal body temperature. The correlation between the basal body temperature and gonadal function is based on the observation that during the estrogen phase of the menstrual cycle, the basal rectal temperature drops progressively. The low point is reached just before ovulation. After ovulation and during the activity of the corpus luteum, the rectal temperature rises gradually, often reaching a level of one degree F. above the lowest point of the estrogen phase. The temperature recedes with the regression of the corpus luteum about two days before menstruation ensues. The vast majority of gynecologists still pin their faith on endometrial biopsy for the diagnosis of anovular menstruation and employ the basal temperature curve as a corroborative measure. For the general practitioner who treats the majority of sterile women, the use of the basal body temperature to determine the presence or absence of ovulation is one of the most valuable procedures in the diagnosis of functional sterility.

The treatment of anovular type of bleeding is still unsatisfactory. The recent availability of a concentrated extract of pregnant mare serum (gonadogen, anteron and gonodin) offers somewhat a brighter outlook at least in nonovulating rhesus monkeys as described by Hartman. If you wish to try it the following

dosage is recommended (1000 international units of equine gonadotropin given hypodermically daily for 6 days following the cessation of the menstrual flow. This course of treatment is repeated during the following two cycles). Reactions are rare nevertheless since the product is a protein derivative and it is necessary to test the patient for sensitivity by the intradermal method. Endocrine drugs as synapoidin and other preparations of combined chorionic and pituitary gonadotropins are as yet not proven definitely to be the answer to the treatment of this type of bleeding.

Thyroid therapy is undoubtedly effective in instances wherein hypothyroidism is seemingly the cause of anovular menstruation. Be it remembered however, that the basal metabolism test is not infallible. The associated symptoms such as fatigue without apparent cause, sensitiveness to cold, constipation, nervousness and a low pulse rate, despite a relatively normal basal metabolism test, suggests the advisability of employing desiccated thyroid tissue as a therapeutic and inexpensive type of test.

Inadequate Progestin Phase:

Unrelated to anovular menstruation in the etiology of functional sterility is a quantitative or qualitative disproportion between the two ovarian hormones, estrogen and progestin, resulting in an inadequate preparation of the endometrium. Premature cessation of corpus luteum function is evidenced by the untimely disappearance of pregnandiol complex in the urine (5 days before the onset of menstruation) may cause premature degeneration of the endometrium and prevent implantation of the fertilized ovum. The logical treatment of such a functional deficiency of the corpus luteum is

the hypodermic administration of progestin in doses of 5 units or mgs every other day during the second half of the menstrual cycle. The objective of progestin treatment is to improve the nutritional state of the endometrium and thereby enhance the likelihood of implantation of the ovum in the event of fertilization. This treatment is purely substitutive. If the luteinizing fraction of the anterior hypophysis were commercially available, injections thereof might be corrective and lasting.

No place in this paper have I mentioned the use of X-ray therapy for pituitary or ovarian stimulation. I do not believe at this time that there is any satisfactory dosage or place for X-ray in the treatment of sterility.

In summary we can say that endocrinology in sterility is of major importance. There is no field of pathology where there is a greater need for correlation of anatomical and physiological considerations, and until a better understanding of the physiology and pathology of endocrinology is achieved, treatment will remain unsatisfactory.

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The ultimate outcome in a minimal case can be favorably or unfavorably influenced by the type of follow-up observation and post-sanatorium living conditions. One must guard against relaxation of close medical supervision, an unregulated daily work tolerance, excessive social activities and economic and environmental deficiencies. I. D. Bobrowitz, M. D., Allan Hurst, M. D., and Margaret Martin, *Am. Rev. Tbc.*, Aug., 1947.

Tuberculosis must unquestionably be recognized as the most serious public health problem among non-white races. Mary Dempsey, *Am. Rev. Tbc.*, Aug., 1947.

I have never found a person who was merely a physical being. Most of us have minds and bodies and souls and you can't treat just one part. Margaret S. Taylor, R. N., Con. on Rehab. of the Tuberculous, March 4, 1946.

Clinico-Pathological Exercise

Medical Case Presented at the Eastern Maine General Hospital, Bangor

Edited by JOSEPH E. PORTER, M. D., Portland

DR. GEORGE ROBERTSON, *Presiding*

Present Illness:

A 77-year-old man was admitted to the Eastern Maine General Hospital complaining of "blood in the urine." About six months previously he was said to have passed some slimy material in the urine. Since that time he has had frequency, nocturia, dysuria and hematuria. The hematuria and dysuria have become progressively more severe. On the day before admission he had been unable to void. When he did void the afternoon of his admission there was gross hematuria.

Physical examination revealed heart and lungs clear to auscultation and percussion. The heart sounds were moderately distant. Abdominal examination revealed no suprapubic tenderness. The bladder could not be palpated.

Laboratory Findings:

No urine was obtained for examination.

Blood: Hb: 10.8 gms. (70%); R. B. C. 3,950,000; W. B. C. 8,300.

Differential: Polys, 66%; Bands, 7%; lymphs, 24%; Monos, 3%.

Course in Hospital:

The patient walked onto the ward at 4.50 P.M. Five hours after admission he was taken to the operating room where a suprapubic cystotomy was performed under local anaesthesia. He was returned to the ward and placed on constant drainage. In the next three hours he was given 1500 cc. of 5% intravenous glucose and 500 cc. of whole blood. Twenty minutes after the transfusion was started the patient had a chill. His pulse rose to 100. An hour later he had another chill and his pulse rose to 130. An hour later (2.00 A. M.) he was quiet. At 4.00 A. M. his blood pressure was 124/60. At 5.00 A. M. he suddenly started choking and turned white. His pulse was not obtainable. He expired at 5.07 A. M.

DISCUSSION

Dr. Joseph Memmelaar: The presenting symptom of this patient was hematuria. When a patient is brought to me with hematuria I like to attempt classification by means of the following schema:

HEMATURIA

A. Symptomatic:

1. Calculi
2. Infection
 - a. Non-specific
 - b. Specific (tuberculosis)
 - c. Infection superimposed on tumors
3. Hematurias of nephritis
 - a. Diffuse glomerular
 - b. Malignant nephrosclerosis
4. Porphyria
5. Hunner's ulcer (interstitial cystitis)
6. Trigonitis
7. Granular urethritis
- Etc.

B. Asymptomatic:

1. Tumors
 - a. Bladder
 - I. Papilloma
 - II. Transitional
 - b. Kidney
 - I. Hypernephroma
 - II. Pelvis tumors
2. Benign prostate
3. Blood dyscrasias

It is important to distinguish the time of hematuria, i.e. whether the hematuria is initial, terminal or well mixed with urine. Bleeding from the lower urinary tract is of the initial or terminal variety, but occasionally it is mixed. The pain which occasionally occurs with essentially asymptomatic hematuria is usually due to clotted blood. The dysuria is a result of the

attempt on the part of the patient to express the clot which acts as a foreign body.

Porphyria is characterized by a wine-colored urine the color of which is not due to blood. It is due to the presence of porphyrin which can be identified by means of the spectroscope. In chronic porphyria there may be a photosensitive pigmentation of the skin. This pigmentation is not seen in the acute form of the disease.

Hunner's ulcer is a type of interstitial cystitis which occurs most commonly in females in the first ten years of the menopause. It may also occur in young females, usually associated with hypoövarianism. There is a small amount of bleeding into the bladder from the areas of cystitis. This can best be demonstrated by overdistention of the bladder. Cystoscopic observation will reveal a slight trickling of blood from the submucosal vessels. There is some indication that this disturbance is due to an endocrine imbalance. The administration of testosterone appears to give some relief. The pathology is similar to that seen in the submucosal layers of the bladder due to focal thrombosis of the arterioles. The cause is not known.

Gross symptomless hematuria in a 77-year-old man is very suggestive of tumor. Tumors of the bladder are not uncommon in this age group. Hematuria may, however, be produced by a large prostate. Prostatic enlargement frequently produces congestion of the veins. As a result of straining, in an effort to urinate, hematuria may be produced. Large blood clots may occasionally be present and produce dysuria. This man's bladder was probably not acutely distended because the bladder was not palpable. For this reason it appears justifiable to rule out an obstructive prostate as the cause of the hematuria.

Calculi, particularly bladder calculi, might produce this man's symptoms. Usually in the presence of bladder calculi there is suprapubic tenderness which this man did not have. Without an X-ray examination we cannot rule out the possibility of stones.

Tuberculosis should be considered as a possible etiological factor in the presence of hematuria, but there is nothing in the history or physical examination to suggest this diagnosis.

In this case it is necessary to explain not only the cause of the hematuria, but also the rather

sudden exodus of the patient. Following the intravenous administration of 1500 cc. of 5% glucose in water and 500 cc. of whole blood this patient had two chills. These chills can probably be explained on the basis of pyrogens in the intravenous equipment or they might be due to bacterial invasion following instrumentation of the lower urinary tract. The rapid pulse and pallor suggest surgical shock. It has been pointed out by Bradley at the Massachusetts Memorial Hospital that shock is very apt to develop in a hypertensive patient who experiences a pyrogenic reaction. We do not know that this man was a hypertensive. There is no record of his blood pressure at the time of admission to the hospital. However, this patient is in the age group in which cardiovascular disease is very common. Because of his clinical course we might suspect that he did have a hypertension and that his death might be explained on the basis of a cardiovascular accident. Other possible causes of his sudden death are pulmonary infarct and massive atelectasis. Such accidents, especially coronary thrombosis, tend to follow significant drops in blood pressure.

Dr. Henry Knowlton: How many people die white?

Dr. Memmelaar: It is not unusual for this to occur. We recently had a man on our service who was walking across the room when he experienced dizziness accompanied by lower abdominal pain. He had marked peripheral vasospasm and stayed white. He died a few minutes later. Multiple pulmonary emboli were found at autopsy.

Dr. Wadsworth: Do you think that the amount of fluid administered might have contributed to the death of the patient.

Dr. Memmelaar: It is possible that the amount of intravenous fluid administered may have been excessive and assisted the rapid development of circulatory failure.

Dr. George Robertson: What is the significance of the slimy material said to have been passed in the urine?

Dr. Memmelaar: Such material is frequently found when there is a sloughing of the bladder mucosa. This material tends to accumulate in the bladder when there is incomplete emptying and in the presence of stagnant urine such as

that found in diverticula secondary to obstruction.

Dr. Robertson: Does it indicate organic pathology?

Dr. Memmelaar: Usually.

Dr. Knowlton: The terminal course of this patient does not sound like a transfusion reaction. If death were due to a transfusion reaction the chills would probably have been more frequent and more severe and he probably would have died before the 500 cc. of incompatible blood had been administered. It is possible that pyrogens may have been responsible for the chills.

Dr. Robertson: Could sepsis following manipulation have been responsible for the chills?

Dr. Memmelaar: The time interval is about right occurring $\frac{1}{2}$ to 3 hours after manipulation, but the subsequent course of the patient indicates that he did not die of infection. One would expect the chills to be followed by a septicemia with the development of coma and a more protracted demise. Fat emboli have been shown to be responsible for sudden death following manipulation of the urinary tract. For this reason it is customary to avoid the use of oily lubricants. It is possible that in this case infection may have been the trigger mechanism producing the cardiac failure.

Dr. Wilbur Manter: This patient was given 1500 cc. of fluid intravenously in addition to the 500 cc. of blood why should he have received so much fluid.

Dr. Memmelaar: It was probably given because of the gross hematuria plus the apparent chronic blood loss evidenced by a hemoglobin of 10.8 gms. and RBC 3,950,000.

Dr. Philip Sullivan: Skin pallor is sometimes a characteristic of large pulmonary emboli.

Dr. Robertson: Pulmonary emboli may be characterized by pallor cyanosis, or rubor. The mechanism of death is the development of reflex changes in the bronchioles and arterioles. There may be a reflex action on the coronary vessels with the production of cardiac anoxia or failure. The short post-operative course is against the diagnosis of pulmonary emboli in this case. The patient walked onto the ward on the afternoon before death. This is an interesting mechanism which occurs in these hyperten-

sives who develop a pyrogenic reaction. There is at first an increased blood pressure. This is accompanied by a clamping down of the renal vessels. Two or three hours later the renal vessels undergo a dilation and the blood pressure falls to hypotensive levels. When they get up they have orthostatic hypotension. The coronaries tend to be dilated. Coronary thrombosis is not apt to develop.

Dr. Joseph Lezberg: The dysuria and hematuria might be explained on the basis of benign prostatic hypertrophy. The sudden death could be explained on the basis of coronary thrombosis.

Dr. Memmelaar's Diagnosis:

Bladder tumor.

Hypertensive pyrogen reaction.

? Coronary thrombosis.

Dr. Richard C. Wadsworth's Diagnosis:

Infiltrative carcinoma of bladder.

Thrombosis of all coronary arteries.

Extensive myocardial infarction.

Arteriosclerotic nephrosclerosis.

Multiple polyposis of colon (benign).

Dr. Wadsworth: The hematuria is adequately explained by the presence of a sessile infiltrating carcinoma of the bladder measuring 3.3 x 3.2 x 1.4 cms. situated adjacent to the left ureteral orifice on the postero-lateral wall of the bladder. Although the left ureteral orifice appeared to be patent, there was a left hydronephrosis and slight hydronephrosis of the left kidney. The bladder was filled with blood clots and a moderate amount of unclotted blood. There were no demonstrable metastatic tumor nodules. Bladder tumors located on the posterior wall of the bladder are late to metastasize, possibly due to the longer course of the lymphatics in the posterior bladder wall.

The patient's death may be directly attributed to the extensive coronary sclerosis. It is surprising that he got along so well previous to his operative procedure. The anterior descending branch of the left coronary artery was grossly occluded at a point 2 cms. from its origin. Histologically a small lumen could be distinguished. The circumflex branch of the left coronary artery was barely patent 2 cms. from its origin. The lumen would just admit the point of a pin. The right coronary artery was sclerotic

Continued on page 69

The President's Page

In our last, the February issue of this JOURNAL, there appeared a reprint of an editorial from the *Journal of the American Medical Association*. The situation was believed to be so serious to the well-being of ethical doctors that every member of the Board of Trustees of the American Medical Association signed and endorsed that editorial. The abhorrent situation which is condemned in it, is that of fee-splitting, accepting rebates or commissions, the taking of "kick-backs" by a few unethical doctors, to the disgust of the public and to the real detriment of all ethical practitioners, who, in the public mind, are tarred with the same stick. The editorial calls upon the state and local societies to clean their own houses.

I want to throw all the influence of this office behind this drive for such a housecleaning. As President of the Maine Medical Association I call upon the Board of Censors of each county society to investigate thoroughly any situations showing improper conduct of any of their members in this regard. And, if any such conduct is discovered, proper formal charges against that doctor should be made, and stern disciplinary action taken.

There can be no plea of ignorance of impropriety to excuse such practices. The ethics of our profession condemn them; the *Journal of the American Medical Association* has repeatedly inveighed against them; common honesty shows them fraudulent and deceitful.

It is my firm belief that very few, if any, doctors in the State are guilty of this misconduct, but if any member of this Association has been guilty I urge that he be swiftly punished so that neither the vast majority of ethical practitioners, nor the public will suffer again from this violation of rules of ethics and common honesty.

STEPHEN A. COBB, M. D.,

President, Maine Medical Association.

Editorials

Program for 1948 Annual Session Presented to Council

Francis A. Winchenbach, M. D., of Bath, Chairman of the Program Committee for the 94th annual session of the Maine Medical Association, to be held at the Poland Spring House, June 20, 21 and 22, outlined plans for the meeting to the Council in session at Augusta, February 15th.

Dr. Winchenbach and his committee must have in mind the old adage "All work and no play . . ." in planning this year's program because there is going to be a goodly amount of social activity between the Scientific Sessions: i.e. the First Meeting of the House of Delegates, which will be called to order at 3.00 P. M., Sunday, June 20th, will be followed by an evening of entertainment when you will meet Mr. Michael MacDougall, "The Card Detective." We believe that most of you are acquainted with Mr. MacDougall's reputation as an entertainer and will want to be there and "Forget your cares for an evening." Flyers relative to Mr. MacDougall have been sent to the Secretary of each County Society with the request that they be brought to the attention of all members — so you all know the treat in store at this first evening session.

Four General Practitioners' Conferences will be the daytime feature of the scientific program. These conferences will run from 9.30 to 11.30 A. M. and 2.00 to 4.00 P. M. on Monday and Tuesday. They will be conducted by specialists in various branches of medicine and have been carefully planned to be of interest to the General Practitioner and Specialist alike. Each member of the Program Committee will have charge of one Conference.

The election of the President-Elect will take place Monday afternoon in accordance with the By-Laws, Chapter IV, Sec. 7, "The election of

President-Elect shall be by direct ballot in the general assembly of the Association at the close of the first general afternoon session."

The Second Meeting of the House of Delegates will immediately follow the Monday afternoon session. The House of Delegates, which consists of delegates from component county societies and officers of the Association, is the legislative body of your Association. If you are a delegate, plan now to be there in order that your county may have a 100% representation. The House will elect a delegate to the American Medical Association for the next two years; Standing Committees will be appointed for 1948-1949; Councilors for the First and Second Districts will be elected; the Budget for 1948-1949 as recommended by the Council will be acted upon. These are just a few of the routine matters to come before the House. All meetings of the House are open to members of the Association who are not delegates.

On Monday evening you will hear Mr. Arthur Conrad of the Medical Service Foundation.

Stephen A. Cobb, M. D., President, has charge of the program for the annual banquet on Tuesday evening, June 22nd. You all know "Steve", and so know that you can look forward to something of vital interest. For instance, Major General Hershey is to be one of the speakers at this closing event of the meeting.

More about the meeting will be published in the April issue of the JOURNAL; the Program in Brief in the May issue, and the complete Program in the June issue. Be on the lookout for these issues of your JOURNAL — and plan now to be among those present at this year's annual session. You can't afford to miss it!

The Council Discusses Veterans' Care Fee Schedule and Other Matters of Interest

The Council of the Maine Medical Association met at the Augusta House, Augusta, on February 15th with a 100% attendance.

Your Secretary, Dr. Carter, informed the members that the Veterans' Administration had

recently accepted the fee schedule for Veterans' Care which was approved by the House of Delegates at the June, 1947, meeting, but that a new contract must be signed by the Maine Medical Association and the Associated Hos-

pital Service of Maine before the fee schedule can become effective. Various phases of the new contract were discussed and it was voted that it be accepted as submitted by the Veterans' Administration. The Associated Hospital Service also agreed to accept the contract.

The Editorial Board met on this same date and presented a report of their activities to the Council, which was accepted. The members of this Board have in mind several suggestions for the improvement of your JOURNAL. You will hear more from them in the future.

It was voted that the Budget Committee recommend further appropriation of funds for Committee Expenses to the House of Delegates in June.

The Residency Training Program at the Veterans' Administration, Togus, was discussed, and it was voted to approve the idea of a full Dean's Committee handling such a program.

The program for the June meeting of the Association, as outlined elsewhere in this issue, was discussed at some length and the members were unanimous in their approval of the plans being formulated by the Committee.

It is not possible to publish in the pages of the JOURNAL a verbatim report of Council meetings, but a complete report of this and other meetings will be presented at the First Meeting of the House of Delegates in June, by Council Chairman, Ralph A. Goodwin, M. D., of Auburn.

American Medical Association Says Public Demand for Service At Night Must Be Met

The American Medical Association calls on county medical societies to meet the public demand for emergency medical service at night.

"From many sections of the United States," says an editorial in a recent (March 6) issue of *The Journal of The American Medical Association*, "complaints have come lately that persons who have called physicians late at night have been unable to secure attendance from either those whom they considered their family physicians or from specialists or, indeed, from any physician."

The American Medical Association says that large county medical societies or urban groups should maintain a physicians' telephone exchange which would take the responsibility for locating physicians if response is not made to the ringing of the telephone in the home or in the office.

The solution is simple and practical, requiring only a minimum of community organization. A number of county medical societies already maintain a physicians' telephone exchange where doctors' calls may be received and doctors located if their office or home telephones do not respond. Such an exchange can be utilized as at night or on holidays, simply by furnishing the exchange with a list of physicians who are able and willing to make night calls. Such physicians would probably include the younger general practitioners, newcomers to the community, and others in general practice. If such a roster were available, and its availability widely publicized, night calls for medical serv-

ice would soon gravitate to this center and the patient would be assured the services of a physician.

Under such a system the necessity for calling many doctors would be eliminated. Two calls at most would be necessary. Where there is no physicians' telephone service, it might be possible to have the hospitals cooperate by handling such night calls.

The Medical Society of the District of Columbia and the Milwaukee County Medical Society have found such a plan practical, as have a number of other societies.

By this simple and practical expedient, which is doubtless in effect in modified form in a number of communities, the sick can be served and the medical profession can redeem its pledge of unselfish public service.

It is highly important that where such arrangements exist they be brought to the attention of the lay people in the community through appropriate public channels, not once but repeatedly, to keep the shifting populations well informed.

Few problems in the field of medical service have aroused so much public discussion. Whether resentment against physicians is justified or not, it does harm. The solution for this problem is so eminently simple and would reflect so favorably upon physician-patient relationships that medical societies everywhere are urged to give it serious consideration immediately.

The Hospital Construction Law in Maine

You, as a practicing physician, have a personal interest in the Hill-Burton Law as it applies to Maine, and your community will also turn to you for guidance in the utilization of the provisions of this law. Thirty states, including Maine, are now ready to begin processing applications for financial aid to specific hospital construction projects. Over one hundred (100) new hospital construction projects in the various states have already been approved. The Federal allotment to Maine is four hundred and fifty thousand dollars (\$450,000) for each of the next five years. The local contribution must be two-thirds ($\frac{2}{3}$) of the cost of a project. Thus Maine may build nearly \$7,000,000 worth of new hospitals with governmental assistance in the next five years.

The Hospital Construction Act (Hill-Burton Act, P. L. 725) provides assistance to the states for the survey and evaluation of existing hospital facilities, and for the preparation of State-wide plans for the development of integrated hospital systems designed to utilize the various facilities of modern society for the provision of adequate, economical hospital care. As a corollary such a system will provide the medical profession with technical facilities which will help the individual physician to give the ultimate in service, and receive the greatest satisfaction from his practice.

Any hospital network is built on two primary factors which are:

1. Geographical distribution, which requires consideration of such variables as:—
 - (a) Transportation facilities, network, and likelihood of disruption. (In general it is felt that a hospital may serve, as its intimate community, an area encompassed by a 15-20 mile radius.)
 - (b) Distribution of physicians.
 - (c) Normal trade, and travel patterns.
 - (d) Wealth, type and density of population.
 - (e) Type or extent of industry.
 - (f) Secondary use to be made of the facility. (Teaching, community, diagnostic, or public health centers for examples.)

2. Size of the various units, which is determined by analysis of items such as:—

- (a) Availability of, or probability of developing a staff.
- (b) Load on existing facilities.
- (c) Social, economic, and racial characteristics of the service area and its population.
- (d) Predicted demand for service based on bed-death, and bed-birth ratios.
- (e) Minimum hospital sizes which can be operated economically. (It is well known that the small hospital is an uneconomical unit for operation both in terms of service rendered and cost. Therefore it is necessary to distribute hospitals in such a way that each will have a service area with a large enough population to support a hospital of such size that it can operate efficiently.)

It is important to realize that proximity of hospital facilities is not synonymous with availability, for either the cost of service, or its location may put it beyond the reach of those who need it.

In many respects our present system is unsatisfactory. We do not have enough facilities. Many of our hospitals cannot be operated economically because they are over-age, were never intended to be hospitals, or are called upon to supply unusually expensive equipment, or service utilized with such infrequency that they are inefficient investments. The distribution may be based on local pride, happenstance, false concepts of convenience and need, or on the transportation facilities of 25 years ago. The financial plight of our hospital system, despite the high cost of service, should suggest the necessity for some fundamental change in our concepts.

Our survey indicated a high and rising rate of acceptance of hospitalization in Maine, with overcrowding of many institutions, and low rates of occupancy in others. At the time of the survey there were 3,035 general hospital beds in the State, of which over 1,300 could be con-

sidered obsolete. Our state plan proposes the development of three hospital nets covering respectively the three regions of the State based on Bangor, Lewiston, and Portland. Each region has a population of approximately 300,000.

The survey may be summarized as follows:

Region	Existing Beds /1000 pop. Total	Non-obsolete only
Bangor	3.1	1.3
Lewiston	3.4	2.0
Portland	3.8	2.4
State	3.5	1.9

Under P. L. 725, Maine may build general hospital beds to an over-all State ratio of 4.5/1,000 population, with a minimum of 2.5 beds/1,000 population in rural areas. Again it should be emphasized that all planning must be on an area, and not a community basis. Every effort must be made to have the hospital serve as large an area as possible. At the present time there are 67 general hospitals in Maine, 40 of which have less than 35 beds. Obviously this latter group is of no value for teaching purposes. The service rendered is limited, and, at least relatively, the cost of such service is high. In many cases small communities are attempting to support several hospitals, no one of which is capable of furnishing complete service, and each of which duplicates the expensive equipment, and plant of the other.

The present plan proposes 55 hospitals in the State-wide system. Only 22 of these will be of less than 35 beds, and of this group only 15 will have 12 beds or less. These latter are designated as community clinics, rather than general hospitals, for their design should include only the facilities needed for common diagnostic purposes, emergency work, transportation of patients to the local area center, and the care of the relatively uncomplicated, or short term patient. The plan distributes a total of 3,933 beds in the State compared with the existing total of 3,035. It is summarized thus:—

Region	Proposed Beds /1000 pop.	Beds which may be built (replace- ment and new)
Bangor	3.9	781
Lewiston	4.4	622
Portland	5.1	874
State	4.5	2,277

There is not enough money in any one yearly allotment to allow all communities to build at the same time. Therefore to protect the community not yet ready to build, and to have assurance that money will go where it is most needed, a system of priority is a part of the plan. This merely assigns to each area a relative priority standing based on the percent of the needed facilities already existing in the area. Thus the area with the largest percentage of its needs already met is on the bottom of the list. There is no question of "first come, first served," for no area will have its priority changed purely by the passage of time. No area low on the priority list will be eligible for aid until those communities above it on the list either receive their funds, or signify their inability or lack of desire to utilize them. Money is allotted each year, and therefore a community which does not utilize its funds this year, will not lose its priority standing, and will have another opportunity next year.

The Department of Health and Welfare has been designated as the State Agency for the administration of this law. As each area becomes eligible for assistance, representatives from the Department will visit, or communicate, with physicians, hospital boards, and others in the area, to inform them of the fact, and help them with their plans.

In general, for approval of a specific project the following conditions must be met:—

- It must be sponsored by a non-profit organization or a governmental unit.
- The sponsor must have $\frac{2}{3}$ of the estimated cost of the project, and means of meeting any anticipated deficit for the first two years of operation.
- The project must fit into the integrated hospital system indicated in the State Plan approved by the Federal Government.
- It must meet priority requirements.
- Construction and equipment specifications must meet the standards established by the Federal and State Agencies.

Hospitals which are built with Federal assistance are not subject to red tape, or outside interference with operation after construction is completed. The Federal money is an outright grant to the sponsor. The U. S. P. H. S., which

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Report of Delegate to the American Medical Association

Your delegate to the interim session of the American Medical Association had the pleasure of making the trip to Cleveland in company with Dr. George H. Coombs of Waldoboro, our candidate for the General Practitioners Award. We arrived in Cleveland without misadventure. Your delegate registered at the Statler where the House of Delegates meetings were held, and Dr. Coombs registered at a hotel somewhat nearer to the Auditorium where the general meetings were held. We met during the session at the Auditorium and your delegate reports that Doctor Coombs was lively as a cricket, was getting acquainted rapidly with all the exhibitors (including the pretty ones who filled in for scenery), and had his picture taken by the Smith, Kline & French Laboratories group in "The Early American Apothecary Shop (1793)." It was a disappointment for us not to have him win the reward but it did not lessen his activities nor his enjoyment of the meeting.

A full account of the Proceeding of the House of Delegates appears in the *Journal of the American Medical Association*, under the Organization Section. The first installment appearing in the issue for January 17th.

The Resolutions and Reports are printed in full. Members of the State Association are urged to read them. If the members of the State and County Associations will read the records carefully they will learn what the A. M. A. is doing about the problems which confront them. Unless the members read them, it seems to your delegate, that they are ill-equipped to find fault in the deliberations of the House at the session. The reports from Committees, Councils and Officers emphasized the value of close contact between County Societies and the A. M. A. "The Grass Roots Conference" was designed to develop closer relationship between the American Medical Association, the County Society Secretaries and the individual physician. This conference was devoted principally to problems of the general practitioner but included also consideration of voluntary health insurance plans; hospitalization insurance plans and improvement of medical facilities in rural areas. The above mentioned subjects are familiar to the doctors in Maine. Our Association has committees that

are considering the problems. Your delegate would like to point out that the A. M. A. has information on these subjects and is ready and anxious to share it with any County Secretary or Committee Chairman.

The Council on Medical Service under the Chairmanship of Dr. James R. McVay made a lengthy report on its activities. In the report Dr. McVay says, "Special effort has been made in recent months to build up contacts with the County Medical Societies. Many County Medical Society Officers receive the 'News Letter' and attend regional conferences. However, it has been evident that a closer contact is necessary if the Council is to report accurately on progress in the field of medical service."

He says further — "Thirty-eight states now have programs in operation." These short extracts are quoted to show that your parent association is working to help State and County Societies with their problems.

For the benefit of those who may read these notes and never read the full reports in the *Journal* let your delegate report that the nursing crisis was discussed and it was recommended that a Committee of members from the A. M. A., American Nursing Association, and American Hospital Association be appointed to continue study of the crisis. Other subjects discussed were the Intern problem, National Emergency Medical Service, New Home for the A. M. A., The World Medical Association, New Section of Diseases of Chest, special programs for Allergy and Legal Medicine at the annual session.

And in executive session the activities of Associated Medical Care Plans, Inc., were considered. This is becoming a big business and requires careful study. It was a busy session. It clearly indicated that the A. M. A. is a hard working, alert organization, and is working for the advancement of good medical care for everyone. The House reaffirmed its previous vote against Governmental Compulsory Health Insurance. It voted to engage new Public Relations Counsellors. And it decided to raise the annual dues.

The next annual meeting will be held in Chicago, June 21st to June 25th.

THOMAS A. FOSTER, M. D.,
Delegate.

The Committee on Prepaid Medical Care

The Committee is now in the third year of its existence. The first year was spent in a study of various medical care plans, conferences with Associated Hospital Service of Maine, and the attempt to obtain legislation for a medical care plan by the doctors. After the failure of both these methods, the Committee turned to consideration of insurance plans under the administration of existing insurance companies. At the November meeting it was decided to invite insurance representatives to meet with the Committee in order to secure the information which they possessed. This meeting was held February 20. Among those attending were Mr. John Farrell, Executive Secretary of the Rhode Island State Society, Mr. Harold Gordon, Managing Director of the Health and Accident Underwriters Conference, Mr. Ralph Walker of the Aetna Life Insurance Company, Mr. Henry Locke of the Liberty Mutual Insurance Company, Mr. H. M. Norman of the American Mutual Liability Insurance Company, Dr. A. C. Wilson of the Connecticut General Life Insurance Company, and Mr. A. W. Perking, Dr. Harry Christianson and two other representa-

tives from the Union Mutual Life Insurance Company. Dr. Stephen Cobb, President of the Maine Medical Association, Dr. Frederick Carter and Mayo Payson and several members of the Council also attended the meeting.

The Rhode Island State Medical Society has been in a position analagous to the situation of the Maine Medical Society regarding a medical plan. Now the Rhode Island Society has set up a prepaid medical care plan with the insurance sold and administered by commercial insurance companies in competition with each other. Mr. John Farrell outlined the Rhode Island Plan. There ensued a detailed discussion of medical insurance with the representatives of the various insurance companies. A committee of insurance experts was appointed to meet with the Committee on Prepaid Medical Care on March 6 next.

It is the intention of the Committee, aided by the conference committee of insurance representatives, to formulate an insurance plan to be discussed with county societies and to be offered for consideration to the House of Delegates at the next annual session.

Clinico-Pathological Exercise—Continued from page 62

and gradually diminished in size from its origin peripherally. About 5 cms. from its origin the lumen could not be distinguished grossly but appeared to be approximately one-tenth of its normal size in the histologic sections. Multiple sections through the myocardium revealed extensive collagenous fibrosis. No recent infarcts could be distinguished. It is not necessary to assume that additional myocardial destruction took place at the time of the terminal episode.

This patient was without myocardial reserve. Any increased burden on this heart might have caused sudden death. It is quite possible that the shock of the operative procedure and the shock of the pyrogenic reaction may each have contributed to produce the small additional load that this heart was unable to carry. The failure was rapid. There was no evidence of pulmonary congestion or edema.

Tuberculosis is so deeply a personal disease that news of its tragic onset or advance can be more calmly accepted when the source of the news is the family doctor and not a stranger from a distant agency. Ed., *Pub. Health Rep.*, Dec. 6, 1946.

It is wise to assume that all subjects who show a positive tuberculin test before the age of three years have active infection. In such children, the infection has hardly had time to become inactive. Joseph D. Wassersug, M. D., *N. E. Jour. Med.*, July 3, 1947.

Some Medical Aspects—Continued from page 56

One often sees persons who are continuing to live on a low fat diet years after a cholecystectomy. It is difficult to maintain nutrition over a long period of time on such a diet and entire abstinence from fat in the diet is not required by absence of the gall bladder. Even persons with chronic hepatic cirrhosis may be allowed a modest amount of uncooked fat in the diet with benefit.

Analysis of the patient's diet is an essential part of history-taking; it is more than ever important if the patient is elderly. So many old people eat improperly. Their dentures may be ill fitting, to the extent that they prefer to eat without them. This leads to a diet which is soft, requires little mastication, is high in carbohydrate and low in protein and vegetables. The high carbohydrate intake causes dissipation of the small amount of Vitamin B in such a diet. Lack of protein and Vitamin B will eventually cause injury to the liver. Vitamin B deficiency in the diet effects not only the tongue and mouth but the whole digestive tract so that digestion and absorption are hindered. Many old people who live alone do not take the trouble to provide themselves regular meals which are well balanced. It is a mistake to con-

clude that because the patient has lived to old age in spite of a poor diet, the diet can do no harm. Such reasoning is fallacious because investigation shows that the diet has not always been deficient. We need not wait for pellagra, cheilosis, or glossitis to appear before we make a diagnosis of too few calories, or too little vitamins or protein in the diet.

As the end of life approaches, some people are afraid; they are loathe to trade their restricted existence for an uncertain state. Most old people are not afraid to die or at least I believe them when they say they are not. But there is one thing nobody relishes and that is a long, uncomfortable sickness. And how do you know that if you fail to take care of yourself that you will die suddenly? It is rather more likely that you will be letting yourself in for weeks in bed. We have to use this line of reasoning because the elderly are subject to times of discouragement when life seems hardly worth the effort. A long time ago I became convinced that most old folks with chronic disease died just when they did, not because they were suddenly worn out but rather because they did some unusual thing which they knew perfectly well they should not do.

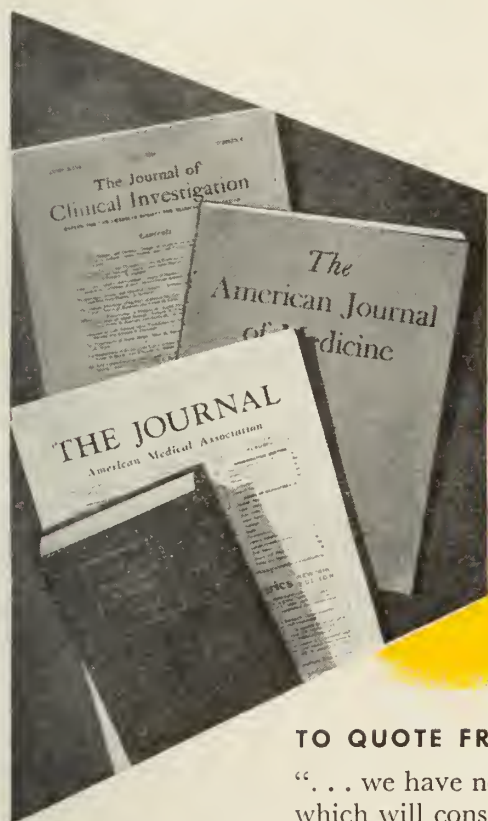
The Hospital Construction Law in Maine—Continued from page 67

is the National Administrative Agency, is being liberal in its interpretations, and minimizing formalities in its efforts to develop the basic concepts of P. L. 725. The State Agencies are required to give certain assurances that their administration will be completely fair, will promote the intent of the Act and will meet the particular needs of the state, or community. The state plans are neither standardized nor

static. In fact, each state is required to review, and revise its plan each year to meet the needs, and problems which will become apparent as the program progresses.

We hope that the integrated hospital system which is envisioned will be the basis for solving many of the current problems of hospital care, and will contribute to the development of medical practice in Maine.

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1. Combined Staff Clinics of the College of Physicians and Surgeons, Columbia University: *Am. J. Med.* 1:676 (Dec.) 1946.
2. Comroe, B. I.: *J.A.M.A.* 128:848 (July 21) 1945.
3. Council of Pharmacy and Chem-

istry: *New and Nonofficial Remedies*, 1947, Philadelphia, J. B. Lippincott Company, 1947, p. 477.

4. Freyberg, R. H.; Block, W. D., and Levy, S.: *J. Clin. Investigation* 20:401 (July) 1941.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

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County Society Notes*100% Paid Membership for 1948***Piscataquis County Medical Society****Cumberland***Officers for 1948*

President, Harold J. Everett, M. D., Portland.
 Vice President, Charles H. Gordon, M. D., Portland.
 Secretary-Treasurer, Joseph E. Porter, M. D., Portland.

Delegates to the Maine Medical Association (Two years): Dr. Frank A. Smith, Westbrook; Francis M. Dooley, Portland; and Franklin F. Ferguson, Portland. (One year) Drs. Oscar R. Johnson, Portland; Maurice J. Dionne, Brunswick; James M. Parker, Portland; and Ervin A. Center, Steep Falls. Alternates (Two years): Drs. William R. McAdams, Portland; and Eugene P. McManamy, Portland. (One year): Drs. Kenneth E. Dore, Fryeburg; Louis A. Asali, Portland; Carl E. Dunham, Portland; and Harry E. Davis, Portland.

Legislative Committee: Drs. Franklin A. Ferguson and S. Judd Beach.

Public Relations Committee: Drs. Frederick R. Carter and Adam P. Leighton.

The regular meeting of the Cumberland County Medical Society was held January 30, 1948, at the Falmouth Hotel, Portland, with Dr. Eugene E. O'Donnell presiding. Dinner was served at 7.00 P. M. and the business meeting began at 8.00 P. M.

Dr. Stephen Brown briefly discussed the merger of the Children's Hospital with the Maine General Hospital.

Dr. James Patterson read the report of his committee, who emphasized the need for beds for chronic illness in Cumberland County. It was voted that the Secretary send a copy of this committee's report to the County Commissioners.

Resolutions on the death of Dr. Harold Pingree were read, and it was voted that a copy be spread upon the records of this society, and additional copies sent to Mrs. Sewall W. Percy, his sister, and his nieces, Miss Anne Percy, and Mrs. Arthur Hawkes.

There were three physicians elected to membership in this society, Drs. Bernard Burbank, Eugene McGregor, and Nathaniel Mills.

The secretary read a notice concerning the essay contest sponsored by the Association of American Physicians, the subject to be "Why the Private Practice of Medicine Furnishes This Country With the Finest Medical Care." The chair appointed Dr. Donald Marshall chairman of a committee to disseminate information concerning this essay contest to the various high schools.

Dr. Joseph Porter was appointed chairman of a committee to investigate the feasibility of holding an all-day cancer program in the Fall of 1948.

Dr. Charles Glassmire discussed briefly some of the recent publicity given to the hospitals, and felt that there was very little credit given to the medical staffs.

The principal papers of the evening were on the diagnosis and treatment of accessible cancer. An introduction to the subject, with special emphasis on early diagnosis, was presented by Dr. Joseph Porter. Dr. Theodore Bramhall discussed the early diagnosis and treatment of carcinoma of the cervix, and illustrated his paper with numerous lantern slides. Statistics show an increasing delay on the part of the physician in recognizing cancer, and he also included figures to show that the results in the treatment of late cancer of the cervix are very poor. He showed the value of the Papanicolaou technique in the diagnosis of early cancer of the uterus and cervix, and described its use in detail. Dr. James Parker, discussing cancer of the breast, emphasized complete and radical dissection of the breast for cancer in this location, and showed statistics to illustrate that the results of surgical treatment of cancer of the breast when there is no axillary metastases are very encouraging. Dr. Isaac Webber discussed cancer of the rectum, and his paper was illustrated by lantern slides to show that the mortality from operative resection of the rectum is not high, and that if the tumor in the rectum could be discovered early, before metastases, the number of 5-year survivals should be very high. He also emphasized the fact that physicians should examine their patients more thoroughly, and more carcinomas of the rectum could be detected in the average doctor's office if a rectal examination were done. He cited statistics to show that approximately 50% of all rectal cancers could be diagnosed by a manual rectal examination. The paper was discussed by Drs. Holt, Logan, Ives, and Marshall.

JOSEPH E. PORTER, M. D.,
Secretary.

Hancock

A regular meeting of the Hancock County Medical Society was held at the Hancock House, Ellsworth, Maine, February 11, 1948. Ten members were present.

The meeting was called to order by the President, Dr. M. A. Torrey. Minutes of the previous meeting were read and approved.

Dwight Cameron, M. D., of Northeast Harbor, presented a case of Malignant Teratoma of the Mediastinum, which was followed by a short period of discussion.

Lloyd Brown, M. D., of Bangor, spoke on "Common Surgical Diseases of the Chest."

ROBERT H. DELAFIELD, M. D.,
Secretary.

Kennebec

The regular meeting of the Kennebec County Medical Society was held January 15, 1948, at the Augusta

General Hospital, beginning with a clinical session at 5.30. The following staff members presented their cases: Dr. O'Connor—"Foreign Bodies in the Stomach;" Dr. Metzgar—"Intestinal Obstruction" and Dr. Murphy—"Perforated Gastric Ulcer."

Thirty-one members and guests were present to enjoy a very nice dinner served by the hospital.

In the absence, due to illness, of Dr. Gousse, Dr. Small, Vice President, presided over the business meeting.

The minutes of the December meeting were approved, then Dr. Small announced the resignations of Drs. Harris and Wadsworth and two transfers to the county—Drs. Moore and J. B. Valentine, council approved. He announced the application of Dr. Lepore of Gardiner which was referred to the council.

Dr. Dean Fisher was elected to membership.

The Secretary, acting at the request of the nominating committee in their absence, stated that it had been determined by the State Office that we are now eligible for an additional Delegate and Alternate: that they had nominated Dr. H. E. Small, Delegate, and Dr. Kurt A. Sommerfeld, Alternate; they were promptly elected.

It was voted that the County dues be increased from \$3.00 to \$5.00.

Following the business meeting Dr. Clapperton of the Central Maine General Hospital spoke on "Anaesthesia"—he gave a brief history of its development, then reviewed the advantages and disadvantages—the precautions to be taken—indications and contraindications with physical factors involved—the complications and their treatment. He mentioned a few standard techniques.

There are two chief advantages—the excellent relaxation and the reduction of toxic factors.

The anaesthetist must be thoroughly familiar with this branch of the work and all its angles. Incomplete and unsatisfactory anaesthesias are due to inexperienced anaesthetists—rarely to the drug itself.

There are disadvantages—technical errors—respiratory depression from motor anaesthesia at high levels—all these are reduced in proportion to the ability and the experience of the operator.

Following this was discussion—then adjournment.

A. H. MORRELL, M. D.,
Secretary.

Lincoln-Sagadahoc

The Lincoln-Sagadahoc Medical Society met February 27, 1948, at the Hyde Memorial Home, Pine Tree Society for Crippled Children, in Bath.

Eugene H. Drake, M. D., of Portland, spoke on "Coronary Artery Diseases."

Kenneth E. Smith, M. D., of Portland, presented an extremely illuminating series of X-ray studies and dissections of the coronary arteries injected and opened by the Schlesinger method.

ROBERT W. BELKNAP, M. D.

Penobscot

The regular meeting of the Penobscot County Medical Society was held at the Bangor House, Bangor, February 17, 1948, at 6.30 P. M.

Martin C. Madden, M. D., of Old Town, society president, presided at the meeting.

Richard Schatzki, M. D., Radiologist at the Mount Auburn Hospital, Cambridge, Massachusetts, was the scientific speaker of the evening. Dr. Schatzki's subject was "X-ray Considerations of Bleeding from Gastro-Intestinal Tract."

There were forty-six present.

J. ELDRID SMITH, M. D.,
Secretary.

Piscataquis

The regular meeting of the Piscataquis Medical Society was held on February 24th at Greenville. As has been our custom for several years, this meeting was held on the birthdate of Dr. Elmer D. Merrill of Dover-Foxcroft. This year Dr. Merrill is celebrating his 83rd birthday and his 62nd year in the practice of medicine. In honor of the occasion the wives of our members attended.

At the business meeting after the dinner, W. Mayo Payson spoke about the work in progress in the Committee on Prepayment Medical Care Plans and one or two other matters relating to public relations.

The speaker of the evening, Dr. George Young of

Skowhegan, gave a scholarly address reviewing the scientific achievements and developments in medicine during Dr. Merrill's lifetime.

NORMAN H. NICKERSON, M. D.,
Secretary.

New Members

Androscoggin

Dominique A. Martel, M. D., Lewiston, Maine.

Cumberland

Bernard H. Burbank, M. D., South Portland, Maine.

Nathaniel Mills, M. D., Pownal, Maine.

Eugene B. McGregor, M. D., Portland, Maine.

Kennebec

Dean Fisher, M. D., Augusta, Maine.

Washington

Graham Colquhoun, M. D., Eastport, Maine.

Transferred

Arnold W. Moore, M. D., Augusta, Maine.

From: Cumberland County Medical Society.

To: Kennebec County Medical Society.

John B. Valentine, M. D., Augusta, Maine.

From: Piscataquis County Medical Society.

To: Kennebec County Medical Society.

News and Notes

N. E. Cobb, M. D., Director of Calais Hospital

Norman E. Cobb, M. D., was elected Manager of the Calais Community Hospital on March 11th.

Dr. Cobb is Councilor for the Fifth District of the Maine Medical Association. He was graduated from Boston University School of Medicine and served as a navy commander in the Pacific in World War II.

The Pine Tree Society for Crippled Children, Inc.

The Pine Tree Society for Crippled Children, Inc., The Hyde Memorial Home, Bath, Maine, is conducting its annual Easter appeal from February 27 to March 27.

This Society needs your contribution to help them maintain their Pine Tree Camp which accommodates 125 children and is used for the entire summer, and

their new Hyde Memorial Convalescent Home where 50 children will receive treatment throughout the year.

Townspeople Honor Dr. Crosby

On February 23rd, the townspeople of Milo did an unusual and gracious deed. Plans and preparations had been made for weeks in advance. Everybody in Milo had a part in them. The Rotary Club as far away as Bangor had a share in the proceedings. The occasion was held to celebrate the 84th birthday and the 57th year of service as a doctor of Dr. Nathaniel H. Crosby. The tributes paid to the doctor for his years as a general practitioner and friend were heartfelt and sincere. The Maine Medical Association sent its greetings. More than 350 townspeople crowded the town hall. On behalf of the community, Mr. Frank Thompson presented a substantial purse to the doctor.

It was a wonderful way of honoring a man in his lifetime.



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**Bureau of Health
Services for Crippled Children
Clinic Schedule, 1948**

ORTHOPEDIC CLINICS

Portland — Maine General Hospital, 11.00 a. m.: Jan. 12, Feb. 9, Mar. 8, Apr. 12, May 10, June 14, July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.

Lewiston — Central Maine General Hospital, 9.00-11.00 a. m.: Jan. 23, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Rumford — Community Hospital, 1.30-3.00 p. m.: Feb. 18, Apr. 21, June 16, Aug. 18, Oct. 20, Dec. 15.

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 26, Apr. 22, June 24, Aug. 26, Oct. 28, Dec. 23.

Rockland — Knox County Hospital, 1.30-3.00 p. m.: Feb. 19, May 20, Aug. 19, Nov. 10 (Wednesday).

Machias — Normal School, 1.30-3.00 p. m.: Feb. 11, Apr. 14, June 9, Aug. 11, Oct. 13, Dec. 8.

Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Jan. 20, Mar. 3, May 4, July 7, Sept. 14, Nov. 3.

Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: Mar. 2, July 6, Nov. 2

Fort Kent — Normal School, 9.00-11.00 a. m.—1.00-3.00 p. m.: Jan. 21, May 5, Sept. 15.

Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: Jan. 29, Mar. 25, May 27, July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 25, June 23, Oct. 27.

By appointment only.

PEDIATRIC CLINIC SCHEDULE — 1948

Bangor — Eastern Maine General Hospital, 1.30 p. m.: Jan. 30, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Waterville — Thayer Hospital, 1.30 p. m.: Jan. 6, Feb. 3, Mar. 2, Apr. 6, May 4, June 1, July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.

Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: Jan. 28, Mar. 24, May 26, July 21, Sept. 22, Nov. 17.

By appointment only.

HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Wednesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

Tumor Clinics

- Bangor:

Eastern Maine General Hospital

Thursday, 11.00 A. M.-12.00 M.

Director, Magnus F. Ridlon, M. D.
- Lewiston:

Central Maine General Hospital

Tuesday, 10.00 A. M.-12.00 M.

Director, E. C. Higgins, M. D.

St. Mary's General Hospital

Wednesday, 4.00 P. M.

Director, R. A. Beliveau, M. D.
- Portland:

Maine General Hospital

Thursday, 11.00 A. M.-12.00 M.

Director, Joseph E. Porter, M. D.
- Waterville:

Sisters Hospital

1st and 3rd Thursdays, 10.00 A. M.

Director, B. O. Goodrich, M. D.

Thayer Hospital

2nd and 4th Thursdays, 10.00 A. M.

Director, A. H. McQuillan, M. D.

Medical Films Available to County and State Medical Societies

Many very fine motion pictures were produced by the Bureau of Medicine and Surgery of the U. S. Navy during the last war, but the films are not easily available on a loan basis. Therefore, the A. M. A. Committee on Medical Motion Pictures is planning to include in the A. M. A. Film Library (535 North Dearborn Street, Chicago 10, Illinois), a select group of these basic films so that they will be readily available to county and state medical societies as well as to other medical groups. Medical films produced by the U. S. Army are available on a loan basis by writing to: Chief, Division of Training and Education, Office of the Surgeon General, War Department, Pentagon Building, Washington 25, D. C.

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Rockland, Rumford, Sanford, Waterville, Wilton, Millinocket, Old Town, Portland, Presque Isle, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.



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For a dealer in Spencer Supports look in telephone book for "Spencer corsetiere" or "Spencer Support Shop," or write direct to us.

*Barr, Joseph S., *Ruptured Intervertebral Disc and Sciatic Pain*, Jr. Bone and Joint Surg., 29: 429-437 (April) 1947.

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Book Reviews

"Treatment in General Practice"

(Sixth Edition)

Treatment in General Practice: By Harry Beckman, M. D., Professor of Pharmacology, Marquette University School of Medicine, Milwaukee, Wisconsin. 1129 pages. Price, \$11.50. W. B. Saunders Company (1948), Philadelphia and London.

This book needs no introduction to the medical profession because it has been a standard textbook for

many years. This the sixth edition has been thoroughly revised and brought up to date.

Many new subjects are included for the first time, such as Management of Penicillin Reactions, Thrombosis and Embolism, Newly Differentiated Anemias, Non-Meningococcal Meningitides, and etc.

The book is divided into twenty-five sections and is of especial interest to students and practitioners alike.

The American Illustrated Medical Dictionary

By W. A. Newman Dorland, M. D., Member Committee on Nomenclature and Classification of Diseases of the A. M. A.; with the collaboration of E. C. L. Miller, M. D., Medical College of Virginia. 21st Edition. 1600 pages with 880 illustrations, including 233 portraits. Price, \$8.00 without thumb index; \$8.50 with thumb index. Philadelphia: W. B. Saunders Company, 1947.

The reappearance of another Dorland is welcome. Appearing first in 1900, and revised every two or three years thereafter, it has become a byword of the physician, regardless of his specialty. This is the 21st Edition and has been brought up to date including voluminous additions to medical terminology resulting from research and discoveries during the war. A copy should be in every physician's office.

"Sexual Behavior in the Human Male"

Sexual Behavior in the Human Male: By Alfred C. Kinsey, Professor of Zoology, Indiana University; Wardell B. Pomeroy, Research Associate, Indiana University; and Clyde E. Martin, Research Associate, Indiana University. 804 pages—173 charts—159 tables. W. B. Saunders Company (1948), Philadelphia and London. Price, \$6.50.

This new book is based on surveys made by members of Indiana University and supported by the National Research Council's Committee of Research of Prob-

lems of Sex by means of funds contributed by the Medical Division of the Rockefeller Foundation. It is of interest to the medical profession because it provides factual data bearing on many situations that arise with their patients.

The Kinsey report is certain to arouse a great deal of heated controversy in the months and years to come. Its findings are at odds with many prejudices, and false concepts that have been venerated as the truth for centuries. Humankind can never be hurt by truths that help us understand ourselves and our fellow men.



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No. 4

The Life and Crimes of Jesse Harding Pomeroy

By A. WARREN STEARNS, M. D., Professor of Sociology, Tufts College, Medford, Mass.

INTRODUCTION

Nothing stirs society more than the wanton murder of a child. While these crimes are not frequent, they are so horrifying that they tend to become widely publicized and highly dramatized, thus leading to all sorts of conjecture and speculation concerning motivation. Such crimes are not infrequently called "sex crimes" and their perpetrators characterized as "sex maniacs." They are particularly difficult to analyze because usually the victim is dead and the perpetrator will not talk. Although individual cases, when analyzed, frequently fall into quite unrelated categories, the general public throws them all into one group, thus further confusing the issue. Obviously such matters need further study.

On the afternoon of the 22nd of April, 1874, two boys were playing in a pasture in the marsh between what is now South Boston and Savin Hill. In wandering about, they came upon the body of a child, dead but still warm. They immediately alarmed two hunters nearby, who, in turn, brought a police officer.

The body turned out to be that of Horace H.

Millen, 4 years and 3 months old. He was lying on his back in the mud, with his drawers drawn down, his feet extended, blood oozing from both eyes, his throat cut, six stab wounds in the left hand and the left breast full of stabs. The injuries to the body are described in the report of the coroner, Mr. Ira Allen, as follows: "The throat was cut almost from one side to the other by two distinct wounds. The jugular veins were severed. There was a puncture through the lid of the right eye extending into the eyeball. There were three or four punctures through the right hand and six through the left hand. There were eighteen punctures in the left breast, half of them being through the chest wall. The scrotum was almost amputated; the testicles fell out of the private parts when moved." There were tracks in the mud showing that the child had come there in company with an older boy and inquiry revealed several persons who had seen an older boy leading the child by the hand across the marshes. He seemed to be hurrying, as if he could hardly wait to get somewhere. Ultimately this older boy was identified as Jesse Harding Pomeroy, aged 14 years and 5 months.

EARLY LIFE OF POMEROY

Jesse Harding Pomeroy was born in Charlestown, Massachusetts, November 29th, 1859. He was somewhat sickly as a child. At three or four months of age he had a "humour," which healed at seven months of age. He also had sore eyes, which finally healed leaving corneal scars. At one and a half years he is said to have been "just skin and bones," but at three years he was well and hearty. At the age of four or five he was said to be peculiar in his play with other children; he would sit around abstracted or absent-minded, not participating with the other children in their play. At five, a woman saw him with a cat which was bleeding from a knife wound in the neck, which he had allegedly inflicted. After he had cut the cat, he shut the knife up, washed his hands, and then drowned the cat in the river. At eight or nine, he is described as more or less peculiar. People thought he was eccentric, "not right."

He attended the Winthrop School in Charlestown in 1871 and was looked upon by his teacher as "peculiar, intractable, not bad but difficult to understand." He made faces while studying and he could not understand correction, stating, "I cannot help it," thinking any punishment unjust.

In August, 1871, he was very sick with pneumonia (lung fever) and part of the time was deranged. His mother stated that she noticed he was not so well and bright following this illness.

In December, 1871, he went over to Chelsea, across the river, got a strange boy, younger than himself, to go to a hill and there stripped off all his clothes and whipped him. In February, 1872, he did the same thing with another boy—stripped off his clothes, whipped him and stuck pins into him. In August of the same year a third child suffered the same treatment. Because of this, the family moved to South Boston. Shortly after arrival there, he took another small boy out into the marshes, stripped his clothes off, whipped him and made him say obscene and profane words. Early in September, 1872, there was such an experience with still another boy, and then again on September 11th, he picked up a strange boy, took him to the marshes, brandished a large knife over his head and, in fact, cut the boy on the head, danc-

ing around him while he bled. On the 17th of September still another boy was tied to a telephone post and whipped.

On the 20th of September, 1872, he was arrested, pled guilty, and was sent to the State Reform School. There his conduct was good and he was discharged on February 6th, 1874.

Six weeks after he left the Reform School he went to open the store for his mother. A female child came in to do some shopping and he told her to go down cellar. In three minutes she was dead. He locked the front door, cut her throat, and covered the body over. She was missed, but there was no suspicion as to what had become of her. Some months later, some persons who occupied the house after the family moved, in cleaning out the cellar, came across her disintegrated body under some ashes and rubbish.

THE TRIAL

As the result of the death of the Millen boy, Pomeroy was tried.¹ The defense was insanity. One Robert E. Maier, eight years old, testified he was looking in a toy shop when the defendant approached him. "He asked me if I wanted to see Barnum's circus." The boy was taken to Powder House Hill, where the defendant tried to push him into a pond, took off his clothes, tied his hands behind him, and put a milk cork in his mouth. "He then took a switch and hit me. He was laughing at me when he whipped me. He told me to swear and made me say naughty words like 'kiss my ass' and 'shit.' He jumped around me and laughed. He then told me to put my clothes on and dragged me home."

Joseph W. Kennedy, nine years old, testified that he was playing in the sand. The defendant asked him if he would carry a letter somewhere for five cents and then took him to a boathouse, leading him by the hand. "He beat my head against the boathouse, made my nose bleed, then gave me a handkerchief to wipe my nose. He said if I hollered, he would kill me. He stabbed me and scratched my hand with a horseshoe. Then he took me out onto the railroad. He had a big knife. He cut me in the face, three times on each side. Then he cut me here, made me say my prayers and naughty words, and said he was going to kill me, that I never would see my father and mother any more."

John Balch, aged ten years, testified as follows: Three years ago he was looking in a toy-shop window. The defendant asked him if he wanted 25 cents to carry a bundle to Powder House Hill. "He took me into a water-closet, locked the door, undressed me and tied my hands over my head to a beam with a rope like a clothesline. He beat me as hard as he could and stamped on me. He tied my feet, put a handkerchief in my mouth, and asked me if I knew about the Hayden boy."

George E. Pratt, nine years old, was asked to carry a paper to a car station for 10 cents. He refused. He then went to a beach with the defendant, where the defendant asked him to go out in a boat and have some fun. "He said I had told three lies and he was going to lick me three times. He told me to strip. I did not want to. He told me I must, so I did. He took a strap he had around him and hit me on the stomach and head. He paused between blows. He hit me fifty times, stuck a pin in my face, meddled with my private parts and stuck a pin in them. He put his hands over my mouth, threw me down on the floor and bit me on the cheek and back, and right in the rump. He smiled while he was doing it. Then he told me to dress and go to sleep, and he jumped out of the boat and disappeared."

Tracy P. Hayden, aged eight, testified: "He asked me if I wanted to go to Powder House Hill to see the soldiers. There he stripped me and put a handkerchief in my mouth. He licked me with a stick in a backhouse, whipped me with a piece of hard stick and said he would cut my penis off. He tied my feet and hands and tied me to a beam. He whipped me four or five times. Then he dressed me and took me home."

In the Lyman School records of the Pomeroy case² there appears, in addition to the accounts of the assaults upon the Pratt and Balch boys, the following: "The statement given at the hearing by the Austin boy was that the defendant met him on a street in South Boston and induced him, by offering a small sum of money, to go with him under a railroad bridge in South Boston, and when they arrived there, the defendant stripped all the clothing off the Austin boy, and with the blade of a pocket-knife stabbed him several times between the shoulder blades, under each arm, and in other places.

The Doctor stated that he examined the Austin boy September 5th, the day the assault was alleged to have been committed, and found wounds like stabs made by some sharp instrument between the Austin boy's shoulders, under each arm, and the penis nearly half cut off."

The Lyman School record goes on to say: "All of the boys assaulted were very much younger than the defendant. The only persons present at the trial who knew this defendant were his mother and an older brother. His mother stated that he had always been a good and obedient boy, that he had attended school constantly, stood well in his class and had been promoted, that he had never shown any such disposition or traits before, never tortured animals but was kind to them, and was of a kind and cheerful disposition. . . . I asked why he did it. He replied that he did not know. I called each one of the boys up when reading the complaint, pointed them out to him and inquired if he had done what he was charged with. He said 'Yes' to all. He has been living at South Boston with his mother and brother for some time past. His father is not at home. Father's name Thomas J. Pomeroy. Mother's name Ruth A. Pomeroy. His parents do not live together. The mother has charge of the boy."

MEDICAL TESTIMONY¹

Dr. John E. Tyler testified that he had been dealing with mental disease since 1853. He was for four and a half years Superintendent of the New Hampshire State Hospital for the Insane and was at the McLean Hospital for thirteen years. It was his opinion that Pomeroy was insane when he committed the act. His diagnosis was epilepsy. He said Pomeroy always had a peculiar feeling at the time of the crime and had to do these acts. This Dr. Tyler interpreted as an "epileptic aura." The Rogers case was referred to, but in general Dr. Tyler's opinion was based upon the extraordinariness of the acts themselves, especially their ruthlessness.

Dr. C. A. Walker, who had been in charge of the Boston Lunatic Hospital for twenty-three years and had twenty-five years' experience, stated that Pomeroy was laboring under mental disease; that it was a question of epilepsy, petit mal—an obscure case of epilepsy.

In rebuttal, Dr. George S. Choate of New York testified. Dr. Choate was for seventeen years Superintendent of the State Lunatic Asylum at Concord, New Hampshire, had been at the Taunton State Hospital for seventeen years, and for the previous four years had had a private sanitarium in New York. Horace Greeley had been under his care. It was his opinion that Pomeroy was mentally sound and did not suffer from disease; that everyone must admit that his mind was not an ordinary mind; that he was congenitally different from ordinary people, that is, in a moral sense.

All of the doctors emphasized the fact that Pomeroy showed no feeling at all for his victims and manifested no remorse whatever for his acts.

SENTENCE

He was found guilty of murder in the first degree and sentenced to solitary confinement in State Prison for life. He served approximately thirty-eight years in solitary confinement and died in 1932 at the State Farm at Bridgewater, where he had been transferred when he became old and enfeebled.

NEWSPAPER ACCOUNTS OF THE CRIME

As usual, the newspapers made much of Pomeroy's crime.³ All the Boston papers carried large front-page headlines such as "Murder on Dorchester Beach," "A Shocking Murder," "Child Murderer in the Dorchester District," "Statement of the Father of the Boy," "Story of the Supposed Murderer," etc. A great deal of detail is given in the newspaper accounts, especially its most sordid and astonishing factors. There were editorials complaining that there must be something wrong with the law when an individual such as Pomeroy, a moral monstrosity, could be turned loose. As is so often the case, the newspaper accounts were dramatized and exaggerated. These accounts begin on April 23, 1874, and run through to July 21, 1875. The sexual implications were not mentioned, or certainly not emphasized.

During the next fifty-seven years Pomeroy frequently appeared in the newspapers. He was accused of clever schemes to escape and of cruelty to animals while in prison. As a matter of fact, his prison record shows but five com-

plaints of infraction of rules and those were all somewhat minor attempts to cut through the wall and escape.

YEARS IN STATE PRISON

The first sixteen years of his imprisonment were spent in a coke-oven type of cell built when the prison was originally constructed in 1805 for the care of the insane. During the latter part of his life he was a silent old man, rarely talking with anybody except lawyers or clergymen, studying a good deal, learning several languages to some extent, but preoccupied with attempts to obtain his release. He wrote many long and elaborate briefs, never admitting his crime, claiming he had been sentenced erroneously. He received his sentence of first-degree murder because of alleged cruelty, and he always stated that the cruelty was never proven.

Pomeroy was repeatedly examined by psychiatrists during the entire period of his incarceration. In 1914, the then Governor, Eugene N. Foss, appointed a commission of three distinguished psychiatrists and the prison physician to review his case and report. An extract from this report⁴ is of interest as throwing light on his personality and also on the attitude of the times toward the condition from which he was supposed to suffer.

"In order to obtain decisions in his favor and secure a hearing and reconsideration of his case, he has written in the past four years many hundreds of pages setting forth his defence, which has been sent to various courts including the United States Supreme Court, to the Secretary of State and His Excellency the Governor and numerous lawyers. His applications have been invariably denied and he has received no encouragement from legal sources whatever. Nevertheless, he persists in his appeals, taking exception to every adverse ruling no matter how high the authority and will not deny that he intends to continue to urge his claim until he obtains his freedom.

"Throughout his prison life he has been uniformly insensible to personal interest taken in him by others, particularly Chaplain Barnes, whose pupil he had been when a boy and who long befriended, encouraged and helped him in every way in his power. He takes kindnesses as

a matter of course, is highly egotistical and inclined to dictate to the prison authorities. His only interest in his mother is the aid she can give him in securing his release. He shows no pleasure at seeing her but begins on his case as soon as she comes and talks of nothing else. He is very unreliable on account of his untruthfulness. He thinks everyone is against him and apparently never loses his suspicions for a moment. For these reasons it is well nigh impossible to gain his confidence as a step toward changing his mental attitude and improving his lot.

"There is no evidence that the prisoner ever has been lacking in intellectual capacity. His school record bears this out and at the time of his trial he is reported to have had an accurate memory, a good knowledge of localities and geography and to have been bright and shrewd. He appeared to have had his wits sharpened by contact with those who had examined him and showed even then a considerable degree of skill in his attempt to make his case a plausible one for executive clemency. His interest also in study indicates a desire to improve his mind and in his plea for pardon he has shown indefatigable energy and considerable ability to utilize legal points besides acquiring some knowledge of criminal law and his rights under the statutes. All this would be impossible if he had any degree of intellectual defect. His memory is very good except on points the admission of which might weaken his case. He will give no help to the examiners regarding the motives for his criminal acts and is inclined to belittle his crimes. He has no delusions whatever, the nearest approach to one being his fixed obsession that he was illegally convicted, a common one with long-sentence convicts. He believes that criminals should be punished for their offences, showing that he has a knowledge of right and wrong in the abstract, although when asked if he believes that one who, like him, had tortured and murdered children should suffer the full penalty of the law, he evades the question and invariably harks back to the 'illegality' of his sentence.

"On the other hand he is unquestionably defective on the moral side to a degree which at the time of the crime was plainly extreme and much more pronounced than in the ordinary criminal. The unusual, atrocious and cruel na-

ture of his criminal acts, his pursuit of crime for crime's sake only, the absence of the usual motives for crime such as passion, revenge, ill-will and love of gain, his utter insensibility to suffering and his gratification in torturing his victims 'for the same reasons that a cat does a mouse before killing it,' his neglect of ordinary precautions to conceal his acts, his complete lack of remorse or appreciation of the enormity of his crime, his regardlessness of consequences, his failure to react to punishment and his immediate resumption of his criminal practices are typical of the moral defective and, when taken as a whole, are far different from the motives and conduct of the ordinary malefactors. That this amount of moral defect should exist in a person otherwise rational and intelligent is not surprising as it is by no means an uncommon combination.

"Criminals of this type are the bane of prison management. As, by reason of their freedom from delusions, they are not regarded as insane, they are seldom transferred to State Hospitals and so become not infrequently the incorrigibles of the institution. In some, as in the case of Pomeroy, their cleverness enables them to concoct endless schemes for escaping, in which they doggedly persist regardless of failure or the impossibility of success. Like him, they may make plausible accusations of injustice and abuse and resort to ingenious devices for arousing and keeping alive public sympathy, which make them the despair of prison officials. In others constant insubordination and frequent assaults are the rule. The same fear of bodily harm which by his own admission led Pomeroy, when a boy, to avoid injuring adults instead of very young children has no doubt been effective in preventing him while in prison from committing violent acts, the avoidance of which he now claims should be placed to his credit.

"The history of cases of mental defect, whether of the intellectual or moral type, when it is at all pronounced, fails to show any radical improvement from the first. All their lives they are unable to a greater or less degree to adequately control their innate propensities as these are the result of rooted congenital arrest or faulty development of the mind and any gain that is fundamental is impossible. If taken early their lives can be regulated, better habits and more self-control instituted and to some

extent a different outlook on life engendered by constant supervision and special training, but they cannot long retain such gain and are sure to deteriorate unless kept under constant guidance and control. This is especially true of the moral degenerate, of which Pomeroy is an extreme example. In order to prevent their complete demoralization when criminal tendencies are prominent and to properly safeguard the community, their close and continual custody is absolutely necessary. In our opinion, therefore, lack of opportunity alone prevents a recurrence of Pomeroy's criminal propensities in some form and if at large, he would still be a menace to society in spite of his thirty-seven and a half years of solitary confinement.

"In conclusion, we are of the opinion that some amelioration of the prisoner's solitary confinement would be advantageous and that he might be allowed certain of the privileges that are enjoyed by other life-prisoners *provided absolutely effective measures be taken to prevent his escape*. If he could be induced to take up regular employment and if his yard privileges could be extended, always under adequate surveillance . . . life would be less irksome to him and possibly his mind might be diverted from his obsession for escaping and from continuing legal contention about his rights. We should regard it, however, as a hazardous experiment in view of the fact that this besetting determination of his which has been growing in strength ever since his commitment has become a habit of mind and calls for the exercise of the utmost precaution."

Respectfully submitted,

(Signed)

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State Expert for Insane Criminals.

Walter E. Fernald, M. D.,
Supt., Waverly School for Feeble-Minded.

Joseph I. McLaughlin, M. D.,
Prison Physician, State Prison.

Guy G. Fernald, M. D.,
Physician, Massachusetts Reformatory.

Pomeroy's prison history subsequent to this report was, on the whole, uneventful. The

writer knew him during the last twenty years of his life, that is, from 1914 until his death. He engaged in no occupation, never participated in prison industries, and was seen as a gradually ageing old man, nearly blind, with a tremendous hernia, standing about impassive and solitary, not taking part in any of the social life of the institution. During the depression, when the prison became crowded, because of his physical incapacity he was transferred to the prison hospital at Bridgewater, where he slowly disintegrated until his death.

THE MEANING OF CRUELTY

There is considerable evidence indicating that cruelty is an end in itself. However, it is very difficult to determine the status of cruelty because no one admits it. Perhaps the simplest form of what appears to be satisfaction from cruelty is exemplified by the cat with a mouse. She is obviously excited. Having injured her victim, so that he is partially helpless, she sits calmly by, her tail lashing, her eyes partially closed, often purring loudly. She allows him to get nearly to the point of his escape, then pounces upon him, tosses him in the air, struts around. If exhausted, he lies quietly, she pricks him a little with her claws to stimulate further effort to get away. These antics are continued even after life is extinct.

The modern prize-fight frequently presents a spectacle of one contestant, cruelly weakened, being systematically and brutally beaten by his stronger opponent. The audience takes great delight in this, yelling and shouting, "Kill him!" When he is finally knocked senseless, the audience goes wild with ecstasy.

The gladiatorial games of the Romans were accompanied with horrifying cruelty, yet they attracted large audiences, who enjoyed the spectacles and showed little or no mercy.⁵

"To the vast majority of those to whom the name of Timur Lenk or Tamerlane means anything at all, it commemorates a militarist who perpetrated as many horrors in the span of twenty-four years as the last five Assyrian kings perpetrated in a hundred and twenty. We think of the monster who razed Isfará'in to the ground in A. D. 1381; built 2,000 prisoners into a living mound and then bricked them over at Sabzawár in 1383; piled 5,000

human heads into minarets at Zirih in the same year; cast his Lúri prisoners alive over precipices in 1386; massacred 70,000 people and piled the heads of the slain into minarets at Isfahan in 1387; massacred 100,000 prisoners at Delhi in 1398; buried alive 3,000 Christian soldiers of the garrison of Sivas after their capitulation in 1400; and built twenty towers of skulls in Syria in 1400 and 1401."⁶

Again, in certain religious observances the superlative in cruelty is expressed. The Aztecs of Mexico City⁷ reasoned that for a man to survive, the gods who permit his existence must also live and wax strong and that the gods received their best nutriment from the hearts of men. The most successful sacrifices were the hearts of their adversaries in war, but if no war were in progress, they had a ceremonial battle called the War of Flowers so that they could take prisoners for sacrifice. They practiced seven types of blood sacrifice: incision of the heart, flaying, shooting, gladiatorial combat, burning, stone crushing and decapitation. The most common was tearing out the heart while the victim was still alive. Four priests held the victim over a stone block with breast exposed and a fifth priest "plowed his flint knife in a long sweep from the breastbone to the base of the stomach, and reaching into the aperture, with a dextrous twist tore out the heart." Flaying was also fairly common. The victims were stripped of their skins and these were worn by the priests for twenty days. In the burning ceremony each priest seized a captive, bound him hand and foot, lifted him onto his back, dancing a macabre dance around the fire, and dumped his victim onto the flames. They then snatched their captives out of the fire with large hooks and tore out their hearts. In the "meeting of the stones" ceremony, the victim was crushed between two immense stones, which were balanced opposite each other and, as they fell, caught the body of the victim between them.

In the Spanish Inquisition executions for religious non-conformity were carried out by the Auto de Fe (the Act of Faith).⁸ This was made a great ceremonial. Two vast stages were erected in the principal square of the city, one for the penitents and their attendants, the other for the inquisitors with their officials and all the ecclesiastical and secular authorities, while the

windows of the surrounding houses were filled with the notables of the place and their families. In a great procession marched the dignitaries of the church, bearing crosses and lighted torches and the sentences in a box of crimson velvet with gold fringe and a gilt lock and key. An acolyte tolled a bell mournfully at intervals. "Then come the penitents, one by one, each with a familiar on either side; first are the imposters, then personators of officials of the Inquisition, followed in order by blasphemers, bigamists, Judaizers, Protestants, the effigies and chests of bones and finally those to be relaxed, each with two frailes. Mounted officials follow, then familiars in pairs, the standard of the Inquisition, and finally the inquisitors bring up the rear. Thus the procession moves through the designated streets, filled with a densely packed crowd, kept off by railings, to the plaza, where the culprits are seated in the same order, the lightest offenders on the lowest benches." . . . After the sentences are read, "they surround the condemned and march with them to the brasero, to protect them from the populace which, in some places, is accustomed to maltreat and even to kill them. The magistrates provide the asses on which they ride and the wood to burn them. The frailes in charge attend them to the last breath and exhaust all effort to bring about their repentance and conversion. . . . The place of burning — the quemadero or brasero — as a rule was outside of the city. With this the tribunal had nothing to do, except that a secretary and alguazil were present to certify and report as to the execution of the sentences. Consequently the documents of the Inquisition furnish no details, but some may be gleaned from a relation of the Madrid auto of 1632. For this occasion the city had constructed the brasero beyond the Puerta de Alcalá: as there were seven to be burnt, it was made fifty feet square, and had the requisite stakes with garrotes. The confusion and crowd were great, and so also was the fire, which lasted until eleven o'clock at night, by which time the bodies were reduced to ashes, so that the memory of the impious might vanish from the earth."

BULLYING AND TEASING AMONG CHILDREN

Burke of Clark University reviewed 1,120 instances of teasing and bullying among chil-

dren.⁹ The cases involved pursuing, throwing down, holding down, putting the knee upon the vanquished victim, pinching, pulling the hair or ears, striking, shaking, throwing missiles, dancing about the conquered victim, laughing and clapping the hands. A ten-year old pauper in an English workhouse, after a trifling quarrel with his playmate aged five, pursued the girl into the barnyard, cut both her wrists around the bone, set his foot on her stomach and cut her legs in the same manner, and then buried the body. He gave no reason for this except that she was "a very bad tempered child."

Another case cited by Burke was that of a nine-year-old colored girl, who was sometimes left in charge of her sister's two children. She would slap and pinch the two-year-old until she shrieked with pain, if she did not mind. One day the child bit the colored girl's hand in self-defense. Whereupon Hattie (the colored child) snatched up a brick and struck Mary in the face, knocking her to the ground. Then she seized an axe and with one stroke crushed the child's head. She dragged the body out and threw it in a ditch. The child moved and groaned. With "Ain't dead yet, is you? I'll made you dead," Hattie again seized the axe and mashed Mary's head to pulp. Asked why she killed the child, Hattie simply said, "Because she bit me."

Burke cites several instances of cruel acts of children to younger ones in an egoistic assertion of authority. In other cases the children exacted the belongings of other children or got them to perform services for them by threats. One boy would whip his younger brother until the latter swore and then, under threat of exposure, would make the younger do all the chores for him. The series of cases also illustrates the impulse to excite other children to anger by teasing, such as pitching a ball out of a younger boy's reach or hiding his hat, or by name-calling, emphasizing personal peculiarities, such as "broomstick legs," "sorrel-top," "pig eyes."

From the above it seems permissible to draw the following hypothesis, namely: cruelty satisfies an inborn propensity in all human beings. By a process of indoctrination, tenderness and gentleness are enhanced and cruelty are under pretty strict control. Often the code among younger boys exalts cruelty and despises ten-

derness. Wherever cruelty is sanctioned, as in games, religious ceremonies, warfare, it is freely and openly expressed and is not interdicted.

CRUELTY AND SEX

The relationship between cruel and sexual impulses has attracted more or less attention. The word "sadism" ("so named from the notorious Marquis de Sade, whose obscene novels treat of lust and cruelty")¹⁰ has been used to designate purposeful cruelty. Of late it has tended to connote more and more sexual satisfaction. While there is evidence that in certain cases sexual satisfaction is enhanced by brutality, both on the part of the perpetrator and the recipient of such brutality, it does not seem feasible to throw all satisfaction coming from cruelty into the sexual field. The Pomeroy case is a case in point. Judging from the testimony of his victims, he was tremendously stimulated by the ordeal through which he put these children. For the most part, he stripped off their clothing. This may be interpreted as sexual, or it may merely have added to their helplessness and embarrassment. He appeared to enjoy mastery over them; he pranced around them, menaced them, and exulted in their fear and helplessness. He also forced them to say indecent words and do things their people had taught them were naughty, thus enhancing his mastery over their helplessness. He then brutally did things which hurt them, like sticking pins into them, cutting them with a knife, whipping them with a belt or lash, or dowsing them in water. It would appear that the superlative, almost ecstatic act was the slash across the throat; then the hurried, panicky escape.

It is noteworthy that most of these cruel murders are committed by adolescent boys, in the 14th year in many cases. It has been assumed that this is a propensity that would last throughout life, yet there are many examples of barbarities committed by adolescent boys, where this propensity has entirely disappeared during adult life. There grew up around the Pomeroy case a mass of mythology telling of cruelties which he committed while in prison. Insofar as I have been able to learn, these were all false. There seems to be, however, a lack of

remorse, or shame, or sense of guilt, in these cases.

CRIMINAL RESPONSIBILITY

Such cases present a dilemma to the courts in the matter of criminal responsibility.¹¹ The man on the street immediately thinks such persons must be insane to behave so atrociously. Yet, generally speaking, the courts have found them sane.¹²

It seems strange that science and law should have been able to work side by side for so many centuries without getting nearer together. Dr. Johnson once said, referring to ghosts, "Science will disprove, but the people will always believe." So in the futile search for an absolute test of irresponsibility, one might say, "Science has always disproved, but the law continues to believe." Yet there seems to be a gradual evolution throughout history which, if it has not settled the time-old question, has at least resulted in better administration.

The law in this country (except in New Hampshire) is summarized as follows:* A person is not criminally responsible for an offense if at the time it is committed he is so mentally unsound as to lack (1) knowledge that the act is wrong, or (2) (in seventeen states) will power enough to resist the impulse to commit it. The first part of this rule is the so-called "Right and Wrong Test" and the second part, the "Irresistible Impulse Test."

It is interesting to trace the historical development of these tests. It appears that insanity did not become a defense to crime in England until the fourteenth century. The early decisions did not seek to set up general principles as much as to give illustrations justifying decisions. Lord Hale, who was used as an authority by Blackstone, believed that the moon had a great deal to do with insanity and especially with lucid intervals. Hale lived in the days of witchcraft, that is, in the early sixteen hundreds, and frequently took a hand in punishing them. One decision, "That if he bee able to beget eyther soone or daughter, hee is no foole," seems to be the most astonishing as well as specific.

It is obvious that the concept of mental disease as an excuse for crime was at this time very narrow. With the gradual transition from specific and concrete tests to more abstract concepts one can perhaps trace the gradual socialization of the law. Whether one could beget a child or not was certain, capable in many cases of exact demonstration. The use of the "Wild Beast Test," which followed, also seems to indicate the need of gross insanity to be considered adequate. The rule of Fitzherbert, requiring the possession of discretion, seems to be broad enough to allow for the widest play of opinion. To Hawkins, in the late eighteenth century, is attributed the sentence, "Those who are under a natural disability of distinguishing between good and evil as infants under the age of discretion, ideots and lunatics, are not punishable by any criminal prosecution whatever." It is assumed that this is the first expression of what later came to be the "Right and Wrong Test."

Strange it seems that Lord Erskine should have been able to have said in 1800, "If a total deprivation of memory was intended by these great lawyers to be taken in the literal sense of the words, then no such madness ever existed in the world," and to have won his case, while subsequent events have kept partial insanity very much in the foreground.

Whether one starts at the beginning and works forward, or at the present and starts backward, his attention inevitably becomes focused upon the great M'Naghten case of 1840. Though found not guilty on the ground of insanity in 1843, five questions were accordingly put to the fifteen great judges of England regarding the then existing law of insanity. Their Opinion has given grounds for speculation and dispute ever since. It is still the rule in England and to quite an extent in this country. Every expert of any experience before the courts today has seen repeated evidences of the predominant position of this Opinion. Although it has little standing in science or in fact at the present time, it still persists as evidence of the fallibility of human nature. Almost every word in the decision has been subjected to the scrutiny of excellent minds and ambiguities have been repeatedly pointed out. Among the outstanding discussions in American law are to be mentioned that

*For much of the material in the following paragraphs the writer is indebted to a study made by Henry Weihofen under the auspices of the University of Chicago Law School, titled, "Insanity as a Defense in Criminal Law."¹³

of Judge Lemuel Shaw of Massachusetts in 1844, Judge Doe of New Hampshire in 1866, Judge Somerville of Alabama in 1886, and Judge Cardozo of New York in 1915. These are all attempts to clarify the metaphysical concepts set forth in the M'Naghten case.

Clinical psychiatry, as at present understood and practiced, does not enter these discussions. While the best legal minds have been grappling with the metaphysical problems of right and wrong and of freedom of the will, problems inherited from the clerical profession, medicine has little by little gotten away from this attitude and has built up a concept of mental disease. Though obviously it is the function of the courts to make final determination in these matters, it is usually necessary to use physicians and their data as aids. Whereas the law has continued to think in terms of abstract mind, medicine has more and more stated its opinions in terms of disease and its effect upon human behavior. This is perhaps unavoidable. A decision must be given in the law. In a general way the law is obliged to answer questions with finality, which science is permitted to answer by saying, "I do not know." Science must answer the question as to whether a given individual knows the difference between right and wrong with a confession of ignorance. If one means right and wrong in the concrete, a dog amply demonstrates by his behavior that he knows when he has done wrong; while if we mean right and wrong in the abstract, no one, I think, would attempt to answer this question with finality.

Likewise as to free agency. Although in concrete cases we judge a man on the assumption that he has freedom of choice, we know that conduct is conditioned by all sorts of physiological and sociological factors. The stresses which ultimately result in an act are known to have a cumulative effect over a long period of time and just as something determines when a ripe apple drops from the tree, likewise that which determines when one is pushed over the threshold set up by inertia or inhibition into overt conduct is frequently obscure. Human beings are loath to leave the known path for one unknown. In the main most attempts to handle irresponsibility through mental tests by the courts have been along similar lines. Most persons who have written on the subject end with

a new test readily seen to be as futile as the old.

Then again, as a metaphysical or philosophical question the problem has led to a lot of discussion and a lot of debate, but practical men, judges and lawyers have usually not found tremendous administrative problems. Reputable doctors, if they believed a person to be insane in the ordinary meaning of the word, have been ready to say that the defendant was irresponsible, including within that term inability to know the difference between right and wrong or any other test with which lawyers might confront them in their questioning. Inversely, among doctors, public opinion and custom have tended to give a fairly definite concept of legal irresponsibility and those not so afflicted have readily been said to have the various capacities which the law requires one to have if he is to be held accountable.

With all its long-time search for a test of irresponsibility, that test is frequently rejected which is the only one in which medicine has absolute criteria of brain disease. In a case of paresis, blood and spinal fluid examinations indicate beyond doubt involvement of brain cells, but because of the existence of legal tests, physicians are rarely willing to say that such a person does not know the difference between right and wrong unless his behavior has been grossly abnormal. It is obvious that an opinion as to whether a man, sick or well, knows the difference between right and wrong is a mere conjecture or inference drawn from very vague data. This being true, how absurd it seems to attach much importance to such opinions. However, it is well known that most competent physicians view this matter pragmatically. That is, if they think their patient is insane in the ordinary sense, they answer all questions in the negative, and vice versa. A great deal of what appears to be wilfulness on the part of physicians has more likely been ingeniousness in trying to work out too literally the needs of the lawyer.

Occasional writings appear which show flashes of insight. This is particularly true of the opinion of Judge Doe of New Hampshire. How refreshing the following sentence appears: "That cannot be fact in law which is not a fact in science; that cannot be health in law which is disease in fact."

From a careful review of the whole matter, it appears to the writer that the New Hampshire rule is by far the most consistent and presents fewer obstacles to good administration than any other. Every doctor who tried to be honest is forced to say, in order to demonstrate the law properly, that a certain man does not know the difference between right and wrong. He says this because he believes him to be insane, yet he knows that this opinion can only be justified by a long series of subtle mental gymnastics. It seems so easy under the New Hampshire rule to cut away all this incrustation of superstition, tradition and metaphysics and let the jury decide from evidence what should be done about the matter. It would almost seem as if the changes in legal definition had gone from the simple to the complex, from the concrete to the metaphysical in order to give experts, as well as the jury, the widest latitude in deciding what should be done.

As these simple and specific tests of antiquity presented obstacles to good administration, newer tests more complex and more abstract have been devised. Looking back over history, one sees a gradual extension of the concept of insanity before the courts, together with an increasing liberalization of administrative procedures. As the weight of social defense has become more important in the administration of the criminal law and the motive of retaliation, or punishment, or even abstract justice has become less important, the introduction of mental disease has seemed less dangerous. Perhaps the time is approaching when there will be one concept of insanity closely related to the present medical point of view, rather than the present distinction between medical and legal insanity.

It seems that the New Hampshire rule frequently upheld provides an opportunity for the application of modern medical knowledge to this age-old problem. The following quotations from Judge Doe should be noted: "All symptoms and all tests of mental disease were purely matters of fact to be determined by the jury." "Tried by the standard of legal precedent, the instructions are wrong; tried by the standard of legal principle, they are right." Judge Doe pointed out that the attempt to standardize tests had met with "a striking and conspicuous want of success," and that the law should therefore

cease "attempting to install old exploded medical theories in the place of facts established in the progress of scientific knowledge." Two years later, Judge Ladd said: "Where the defense of insanity is raised, the real ultimate question to be determined seems to be, whether, at the time of the act, he had the mental capacity to entertain a criminal intent—whether, in point of fact, he did entertain such intent."

A report by Dr. Douglas A. Thom in 1942 shows the reaction of an excellent mind with excellent training to the same situation at the present time:¹⁴

"It is the opinion of the two psychiatrists who made the mental examination that this boy could not be considered as having any specific type of mental disease or mental defect which would have fallen within the legal definition of insanity; that is, there was no evidence of delusions, hallucinations, or other definitely psychotic symptoms, nor was there evidence of any impairment of his intellectual equipment.

"There was, however, no question in the minds of the examining psychiatrists that he was suffering from a constitutional development defect which affected his feelings and his sensitivity towards others, impaired his judgment, and detracted from the inhibitory forces which are common and natural to normal individuals. Although one of his type realizes and understands that it is wrong and prohibited by law to participate in aggressive acts against society, he does not experience within himself any revulsion toward the pain and suffering which his behavior, precipitated by cruel and perverted appetites, would cause others. In fact, it may be said that he actually experiences a feeling of satisfaction in inflicting pain. This lack of sensitivity and the absence of feeling tone toward others is quite as definite in these cases as is the impairment of intellectual endowment that results in feeble-mindedness. Such 'constitutional psychopaths' do not profit from experience. They are given to impulsive outbursts and their behavior is quite unpredictable and without premeditation. As we who are familiar with these cases are well aware, all types of asocial behavior may result.

"This boy prayed and repented at night as a way out of some difficult situation, but before breakfast would resort to cunning, trickery and cruelty. He has been looked upon as a problem

child by his mother since he was three years of age.

"I have attempted to describe briefly a personality type that cannot be considered legally insane, but one that is socially irresponsible, representing a dangerous menace to the community. The recognition of the irresponsibility of this group of offenders by the legal profession and by society would do much toward preventing a repetition of these horrifying tragedies. One should not lose sight of the fact that society also has the responsibility of protecting such individuals against their own constitutional defects.

"So far, neither the law nor medicine has devised a rational method of caring for these individuals. Psychiatry has, however, developed to the point where we are able to recognize the type and can recommend their segregation from society. It is regrettable that there exists at the moment no legal machinery for bringing this about. We are forced to wait until some type of criminal behavior actually occurs before legal action can be taken. Because of their youth, these individuals have their cases filed, are placed on parole, permitted freedom on bail, or allowed through other legal devices to be at large. Of course, such procedures serve no useful purpose. Until we know more about these social misfits society should be protected at all times from their cruel, sadistic, perverted behavior. They are cases which should never be considered suitable for pardon. They do fairly well under strict supervision but revert to type when the opportunity presents itself and restraint is lifted.

"In conclusion I would say, if it is not too presumptuous, that this boy should be considered from the medical and social point of view as an irresponsible individual, for the reasons outlined. There is no reason to expect that the constitutional defects which account for his irresponsibility will ever be eradicated by time or treatment. Society is entitled to absolute and permanent protection from his type.

"Finally, there is a crying need for the legal and medical professions, in coöperation with the legislature and an enlightened public press, to exert all pressure in an untiring effort to have enacted a law which will permit of the recognition of irresponsibility that does not

now fall within the narrow confines of our legal definition of insanity."

PROGRAM FOR THE CONTROL OF DANGEROUS PSYCHOPATHS

Gradually, through the years, those seeking to control the behavior of human beings and to keep their performance within conventional channels have noticed a considerable variation in the tendency of differing personalities to commit crime. At one end of the scale we have individuals who are tractable, easily indoctrinated, whose egotistic satisfaction is tremendously enhanced by the commendation of their fellows, and so tend to lead what has been called "the good life." At the other end of the scale are individuals who are peculiarly resistant to indoctrination, who are selfish, restless, and more or less intractable, and so are prone to commit all sorts of crime. This latter group were very early identified by psychiatrists; some of them are mentioned by Benjamin Rush,¹⁵ some by Pinel;¹⁶ a remarkable case was described by Combe in 1819.¹⁷

Gradually the frankly insane have been taken out of this group and now, in most civilized countries, persons who are frankly insane are regarded as ill and not capable of *mens rea*, and therefore are committed as insane, rather than punished.

For a long time the field of insanity was arbitrarily narrowed. At first, a person must have a delusion, and for many years, at least since 1843, the capacity to distinguish between right and wrong has been the legal test of insanity in most jurisdictions. However, despite this obsolete concept, insanity has been gradually broadened until now most experienced psychiatrists certify that anyone who has a psychosis is incompetent. Less definite progress has been made with the feeble-minded, although the concept of the feeble-minded is also very old. In Massachusetts it was very early divided from insanity, such people being referred to as "those naturally wanting in understanding." Yet the feeble-minded criminal has never been so adjudicated. If his feeble-mindedness is gross enough, he is regarded as insane. Those with milder degrees of feeble-mindedness are considered as sane.

However, as early as 1905 a suggestion was

made that we recognize certain criminals as defective delinquents and in 1911 a law was passed in Massachusetts¹⁸ authorizing the commitment of certain offenders as defective delinquents, though in the early stages of thinking about this matter, individuals delinquent mainly volitionally were the particular type which physicians had in mind. When the first institution was actually built in New York, admissions were limited to the feebleminded. Thus nothing was gained. It was already possible to commit feebleminded persons for life, whether criminal or not. Massachusetts followed the lead of New York and since the opening of our Defective Delinquent Colony at Bridgewater, the existence of feeblemindedness has been a necessary factor in order to have one committed there. In fact, the Colony for Defective Delinquents, insofar as it would serve the State of Massachusetts in the matter of crime, was largely sabotaged by the superintendents of schools for feebleminded, who immediately took 70% of its space under the provision of the law authorizing the transfer of troublesome inmates of the schools for feebleminded to this Colony, whether or not they had ever been guilty of crime. The Colony was under the Department of Correction and there has never been any leadership or imagination used to develop it or find out just what its contribution was.¹⁹

As early as 1817 an habitual criminal law was passed in Massachusetts. Under its provisions those who had been in State Prison twice before could be given long sentences as habitual criminals. This law was not wisely used, soon fell into disrepute, and was ultimately repealed. Later, in 1887, an habitual criminal law was passed,²⁰ but once again it was not used; it was unpopular with district attorneys because it interfered with their trading with defense lawyers and only a few were sentenced under it—Corkey Hanley, for instance. It, too, was ultimately repealed. It never included any description of the individual other than the fact that he had had previous convictions. There has been a law for the sentencing of a common and notorious thief which is sometimes used to get at this type of personality. The relative failure of the Baumes Law in New York is recent enough to be a case in point. Whenever an atrocious crime is committed, the public set up

a clamor and a new law is passed, but as soon as the clamor is over, the law is in disuse. A number of states — California, Illinois, Michigan, Minnesota, Massachusetts, Ohio, New York, Wisconsin — have laws for the commitment of sexual psychopaths to hospitals for mental disease. How far these laws have been successful needs further study. But the definition of sexual psychopath is pretty vague from the standpoint of clinical medicine.

SUMMARY AND RECOMMENDATIONS

From my experience, it would seem to me better to try to develop a program for the care of this group from sources of thought and procedure related to the habitual criminal law rather than from sources of thought and procedure related to insanity laws. While habitual criminal laws have been found to be universally faulty and ineffectual, true indeterminate sentences have hardly been tried. In the first place, concepts of personality disorder are almost entirely behavioristic and therefore cannot be predicted in advance of behavior. Although there are some theoretical difficulties involved, if one studies cases, the main difficulty does not appear to be lack of law but lack of effective administration of present laws. It is generally conceded that dangerous psychopathic criminals, whether sex offenders, thieves, firebugs, or whatnot, should be segregated, perhaps for life. This being accepted, the question is, how best to accomplish this. They are universally conceded to be neither insane nor feebleminded. They are universally accepted to be dangerous criminals. Therefore, why not invoke the criminal law, merely modernizing our concept, substituting for the concept of an habitual criminal one involving the personality of the criminal, or adding to the concept of the habitual criminal a further concept involving the propensities rendering the individual unsafe to be at large? Since these individuals are not insane and are not feebleminded, one need not have moral scruples about punishing them. It is not necessary to protect their good name by using the concept of sickness because they are only incidentally sick and are preponderantly bad.

The following recommendations are made:

- (1) If a person convicted of crime is found

to be insane, that is, to have a psychosis, that they be committed under the insanity laws as insane. Because of the dangerous character of these cases, states usually provide a hospital for the criminal insane.

(2) If a person convicted of crime is found to be feeble-minded, that he be committed as feeble-minded and held for such time as is found necessary. Since these individuals are usually dangerous, special provision should be made for them comparable to that for the criminal insane. One institution might well consist of a department for the criminal insane and a department for the criminal feeble-minded.

(3) If a person convicted of crime is found to be not insane and not feeble-minded but subject to morbid compulsions, rendering him dangerous to be at large because of these compulsive tendencies, that he be given a sentence of from one year to life. This would include cruel murderers, sexually dangerous individuals, "fire bugs," poisoners, and other categories dangerous to be at large because of their morbid propensities. These individuals might be confined in a separate ward or department of a prison, or they might conceivably be in a separate department of the previously mentioned hospital for insane and feeble-minded criminals. My preference at the moment would be a department at the prison. That is, I think they should be considered as criminals rather than as sick people.

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*End Results in One Hundred Cases of Cholecystectomy**

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There exists in the minds of the laity and of some physicians a certain amount of skepticism regarding the benefits derived from cholecystectomy. Undoubtedly some of this is justified. We all have seen patients who have had their gall bladders removed without obtaining the relief of digestive disturbances that they expected. This failure to relieve the patient has given rise to the term "postcholecystectomy syndrome," which in itself is a bad term. In all probability, it is not the removal of the gall bladder that has caused the postoperative disturbances. Rather the symptoms are probably due to some other preoperative condition that was overlooked when the gall bladder was removed.

In reviewing one hundred consecutive cases of cholecystectomy performed at the Eastern Maine General Hospital, I have tried to correlate the clinical history, the physical findings, X-ray examinations, operative findings, and the pathological reports with the follow-up history, to determine exactly what our end results have been, and to see why some patients failed to obtain the results they had hoped for.

These one hundred cases are unselected. They include surgery performed by staff members on both private and ward cases. No attempt was made to segregate acute from chronic cases, except to determine the percentage of each, and to note any differences in the end results. There were thirteen males and eighty-seven females. The youngest patient was a young lady of twenty-one years, and the oldest patient was a man seventy-seven years. The average age for the one hundred cases was 58.7 years. This figure is higher than some reported from other clinics. It is reasonable to assume that a sharper outlook and an increase in diagnostic accuracy will lower this age figure.

The duration of symptoms before operation is a very important point to consider, relative to end results. Our figure shows that the average duration of epigastric distress, gas, in-

digestion, and colic was 17.2 months. The shortest period of distress was about two weeks and the longest was fifteen years. There is no question but what early operation in cases of cholecystitis with stones will greatly improve our postoperative end results. All too frequently patients are carried along on alkalis, bile salts, and antispasmodics for many months before even a Graham test or a gastrointestinal series is suggested. Here is one point where we can improve our treatment of gall bladder conditions. We have presumably reached the acme of good surgical technic and methods of diagnosis, but all our advances in the knowledge of biliary tract disease will be weakened unless we learn to make the diagnosis early. Delay in the treatment produces such complications as acute cholecystitis, cholangitis, common duct stone and pancreatitis. Furthermore, I am sure that you have all noted that even in some early cases there is frequently liver damage in the area closely surrounding the diseased gall bladder, and it is known that the longer the symptoms have persisted the larger will be the areas of liver damage. Unfortunately, in the description of the operation in most of these cases, no mention was made of the degree of liver involvement. However, from the follow-up records, it appears that the end results in early surgery are much superior to those of late surgery.

The one avoidable factor in improving our results is to shorten the delay in treatment. Earlier diagnosis of biliary tract disease and earlier surgery will reduce our complications. In an article written a few years ago, Dr. Frank Lahey stressed the value of early diagnosis and surgery. He felt that acute cholecystitis rarely occurred until gall stones had been present for some time. He stressed the association between pancreatitis and cholecystitis. Other complications such as hepatitis and diminished liver function in biliary tract disease have a direct relationship to long standing infection within the biliary system. If we will only diagnose gall bladder disease earlier, and, if indicated, we will encourage patients to undergo surgery

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when symptoms are minimal, then we will note a very marked improvement in our postoperative results.

In this series of cases, follow-up reports show that 61.8 percent had very good relief of symptoms, 38.2 percent showed partial relief. In the former group, in general the duration of symptoms was for a definitely shorter period of time, again stressing the importance of early diagnosis and surgery. In the latter group many patients still had episodes of gas, indigestion, bowel disturbances, and dietary restrictions. Some were still taking bile salt preparations. Compared to other series of reported cases, our results, as far as the alleviation of symptoms is concerned, are not quite as good. In general, 80 to 85 percent are reported as well after cholecystectomy.

Another factor of great importance in the end results, is the proper selection of cases for surgery. It is well known that best results are obtained when stones are present in the gall bladder. In this series of cases, stones were present in 94 percent. Six percent showed no stones but presented the pathological picture of chronic cholecystitis.

It is interesting to note that the postoperative complications were few. The mortality in this series of one hundred consecutive cases was two percent. One patient, a fifty-three-year old male, died on the sixth postoperative day following severe distention and vomiting. No post-mortem examination was obtained. The patient had his gall bladder removed for chronic cholecystitis and cholelithiasis. The immediate postoperative course was uneventful. On the third day he was moderately distended and started to vomit. In spite of supportive therapy, his temperature and pulse continued to rise and he expired on the sixth postoperative day. The cause of death was stated to be uremia although there is no proof of such in the clinical record.

The second patient was a fifty-three-year old house wife who had a typical story of gall bladder colic. A cholecystectomy was performed in an uneventful manner. The patient did well and was up in a chair on the eleventh postoperative day when suddenly she had an evisceration. Under general anesthesia the wound was resutured. She did well until her twelfth

postoperative day when she suddenly became very cyanotic and had marked difficulty breathing. She died of a pulmonary embolus.

This figure of two percent mortality corresponds very well with figures quoted from other clinics. The number of immediate postoperative complications were relatively few. A review of the charts showed the following. Three patients went into varying degrees of shock soon after the operative procedure was completed. All responded well to supportive therapy. One patient developed a subphrenic abscess on the right side which required surgical drainage. It was this patient who returned six months later for drainage of her common duct. One patient developed a phlebitis and ran a secondary fever for a few days, but recovered without serious complications. There was one wound abscess in the group. As already stated, two patients died.

It is the policy in many clinics to drain the common duct more frequently. It is surprising to note how the incidence of common duct stone increases when this is done. A report from the Lahey Clinic in Surgical Clinics of North America in June, 1943, stated that 38 percent of the common ducts were explored and 14.2 percent showed common duct stone. In our series, the common duct was opened on only three occasions and each time stones were found. One patient continued to have attacks of gall bladder colic after cholecystectomy. She returned mildly jaundiced to the hospital six months later, and had the common duct explored and stones removed. One other patient had a mild attack of colic and became slightly jaundiced about three months after cholecystectomy. She was urged to return to the hospital but refused to do so. Her jaundice cleared in about a week and she has had no further attacks.

I believe that we might have obtained a higher percentage of good results, if the common duct had been explored in more than 3 percent of the patients. We know that there is frequently a certain amount of cholangitis and pancreatitis associated with chronic cholecystitis. T-tube drainage will help reduce these inflammatory changes and likewise reduce the number and degree of unsatisfactory results.

A complete pathological report was accom-

plished in each of the one hundred cases. The highest percentage of cases were reported as showing either acute or chronic cholecystitis with stones. Four percent were interpreted as acute cholecystitis and all of these had stones. One of these, a female patient, age seventy-one years, had acute cholecystitis with rupture of the gall bladder and spilling of many small stones into the peritoneal cavity. Her postoperative course was satisfactory and she left the hospital in good condition. A followup report was not received in her case. The other patients with acute cholecystitis and stones made a good postoperative recovery and were reported as feeling well. About 6 percent were classified as showing acute and chronic cholecystitis. In general these case histories included repeated attacks of gall bladder colic with an acute exacerbation just before operation. Ninety percent had a pathological diagnosis of chronic cholecystitis and of these, all but six cases had stones. Generally speaking, the group that had stones gave better end results as far as relief of symptoms was concerned. These figures compare favorably with those reported from most other clinics. One series reported by Davis showed stones in about fifty percent of the cases. Another clinic reported stones in ninety percent of their cholecystectomies. The six cases without stones showed varying degrees of cholecystitis, from mild to moderate. In each case the clinical history suggested gall bladder disease. The Graham test in three cases showed faint filling with very little emptying after the fatty meal. Fifty percent of this group of six, were classified as obtaining a good result, and the other fifty percent had fair results. A series of thirty-nine cases of chronic cholecystitis without stones reported by Doran reveals that forty-one percent were symptom free after operation. Correlating the pathological findings with the followup reports, we again find that gall bladder surgery in the early period will bring the best results.

There have been several series reported of gall bladder disease treated medically. It might be of interest to say just a few words about those figures. Eighty-nine patients treated medically were reported by Finsterer. 12.3 percent died of gall bladder trouble; seven died from perforation of the gall bladder and two had carcinoma. Figures quoted by Finsterer

from other series showed 39 percent cured, 40 percent improved, and 21 percent unimproved. Many patients treated medically, and discharged from the hospital as cured, return at a later date with complications that required surgery and it is these complications that increase the surgical death rate.

It is obvious that these figures do not compare favorably with those cases treated surgically. The incidence of permanent recovery following medical treatment is low. This again emphasizes the importance of early surgical intervention in most cases of gall bladder disease. Further evidence of the danger in delaying operation is emphasized by a report from the Mayo Clinic. Of 150 cases of non-functioning gall bladders that refused operation, within two years 27 percent had been operated on for serious complications of biliary disease, such as jaundice, pancreatitis and perforation of the gall bladder.

Now, having reviewed these one hundred cases, what factors do we find that are contributing to the symptoms of patients who have not been completely relieved by cholecystectomy and what can we do to reduce the number of such partial failures.

Early and accurate diagnosis of gall bladder disease and prompt surgical removal of the diseased organ will improve our end results. Such treatment will greatly diminish unfortunate complications as acute cholecystitis, cholangitis, pancreatitis, hepatitis, and common duct stone. In arriving at the diagnosis we must correlate the history with the clinical findings and the X-ray examination. At the time of operation, careful search should be made for any other associated pathology. Undoubtedly the common duct should be opened and drained more frequently than we have done in this series. If this is done, not only will we uncover a greater percentage of common duct stones, but it is felt that such conditions as cholangitis, pancreatitis, and spasm of the sphincter of Oddi will improve. We know that any of these complicating factors will produce digestive disturbances and colic that cannot be distinguished from gall bladder disease. We will reduce our number of failures if we recognize these above conditions and treat them accordingly.

Concerning Hearing Aids*

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Between ten and twenty million Americans suffer from impaired hearing, so that aid to these people becomes a very real and definite problem. After utilizing all the benefits Otol-ogy and otological surgery, general medicine and preventive procedure, there remains a great group of several million who are probably best helped by the use of a mechanical aid to hear-
ing.

The modern hearing aid is essentially a miniature public address system—nothing more and nothing less. Its construction is not highly complex and need not in any case bother us. Its purpose is what we are concerned with, and whether or not it does it, and at how much cost and inconvenience to its user. It comes in a small box you can slip into your pocket, weigh-
ing from eight to ten ounces in all, containing a microphone, vacuum tubes, batteries, volume control, and often tone control. It costs from fifty to two hundred dollars, depending upon the make and servicing supplied with the pur-
chase. To operate it costs from one-half to one and one-half cents per hour for batteries while it is in use. The upkeep, apart from the actual results of abuse or accident, is a small matter.

At the offices of the New York League for the Hard of Hearing you may get advice and try out all the aids which the A. M. A. has accepted—more such offices should be estab-
lished throughout the country.

Otologists are not free from blame for back-ward conditions. They have held themselves aloof from this matter regarding hearing aids, either because of simple neglect, or the feeling that it required a sound engineer to talk about them. It doesn't, we don't and won't make them, but we can by experience acquaint our-
selves with what they do, and at what cost, up-keep, and inconvenience. We are in a position to see the whole picture from the Otologists' standpoint and from the physicians' standpoint, since that is what we are—and let us not for-
get it! The complex part lies not in the hearing

instrument but in the human organ of hearing, in the physical state supporting it, and the men-
tal and psychological equipment surrounding it.

How improper then to simply say, "Go out and get a hearing aid," and give him no help as to what type, air or bone conduction, what best ear to use it with, what to expect and what not to expect in the way of help from it, and finally to drop all responsibility in educating him to hear with it. You see, we train all these years, have our patient come to us for the help he should expect from a very highly trained source, and we finally pat him on the back and pass him over to an ex-drug salesman, to tap the only real source of help that we often have to offer.

Deafness should not be considered a part of a person, but as a hurdle to jump over, using the means of science, both medical and me-
chanical, education and psychological training to increase the ability to jump, so that the greener pastures on the other side may be reached or regained. Deafness in the non-suppurating ear due to obstruction offered to the sound passing by normal channels to the nerve labyrinth has in the last several years offered a challenge to the surgeon Otol-
ogist, and undeniably brilliant results have been at-tained. However, there are still part failures, and complete failures, and even others with in-jured labyrinths, facial paralysis, etc. The operation is still in the process of evolution, is extensive and intricate, and still really belongs in the hands of a fairly few.

Average gains in selected cases reported by Shambaugh, Lempert, Campbell and House were 25.7, 24.3, 21.8 and 22.5, respectively.¹ In a selected series fitted with hearing aids the average gain was thirty-nine per cent.

In reporting results of fenestration proced-ure, the bad should be reported with the good in consecutive series. A similar series by acous-
tical engineers would be interesting. Figures by the Council on Physical Therapy of the

* Presented at the 93rd Annual Session of the Maine Medical Association at York Harbor, Maine, June, 1947.

1. "Laryngoscope," 52:615-628 (August), 1943.

A. M. A. show an average gain of thirty decibels for hearing aids.

The fenestration operation offers nothing to the large group with congenital nerve defect, or the predominately nerve loss hearing, or the ear that refuses to dry up and stay that way, to the quite young child in his growing and learning years, or to the elderly.

Then a well-fitted hearing aid can often equal or better the amplification or the fenestration operation, and to an acoustically much wider group of hard-of-hearing persons, with less expense, pain and worry. This is simply the present state and may later change, but it does mean that the Otologist cannot yet remove his necessity for attention to the patient best helped by a mechanical hearing device. A very good guide was published in *Hygica* for the person needing this help:

"Anyone who thinks he might be helped by a hearing aid should note these guideposts:

"1. Go to the best otologist you can find. Have him determine whether the loss of hearing is temporary or progressive, or in restricted tonal areas of hearing. No mere salesman should be trusted to tell you these important facts.

"2. If it appears that you need an aid, get one. Everyone you meet probably knows already that you don't hear well. A good aid often isn't noticed at all and in any event isn't anything unpleasant to see.

"3. Be skeptical of glowing advertisements.

"4. Take a friend with you when you go to

try the aids. Don't test the set by listening to the salesman's voice.

"5. Have the friend read aloud to you the list of 25 test words provided by the Volta Bureau, and see if you can distinguish between such words as 'fan' and 'van,' 'rack' and 'rag,' 'thy' and 'thigh.'

"6. Go armed with the list of AMA accepted aids, available at the Council on Physical Medicine, 535 North Dearborn Street, Chicago 10, Ill.

"7. Remember there is no 'best' aid for everybody. The best aid for you is the one which enables you to hear human speech best—not too loud, with a minimum of disturbing overtones.

"8. Insist on a week's trial in your ordinary surroundings. If the company charges \$10 or \$15 deposit for this, deductible if you finally buy the aid, that's fair.

"Wear it. Use it. Be patient. You may have to learn to hear all over again, and to adjust your own voice properly. Write to the Volta Bureau for their Reprint 565, containing detailed instructions.

"10. Expect the aid to give you adequate, not perfect, hearing. Expect it to last from three to five years. Upkeep for batteries runs from \$30 to \$50 a year, depending on use and size.

"Then look forward to increased sociability, improved friendships, and more contented hours."

End Results in One Hundred Cases of Cholecystectomy -Continued from page 95

CONCLUSIONS

1. One hundred cases of cholecystectomy have been studied and the end results scrutinized.
2. In general, the results of surgery have been very satisfactory. Our percentage of complete relief of symptoms is not quite as high as those shown in some other clinics.
3. The duration of symptoms before surgery was performed was too long, thus contributing to some of the unsatisfactory results.
4. Our best end results were in patients with chronic cholecystitis and stones.
5. We feel that in many cases, such complications as cholangitis, pancreatitis, common

duct stone, and hepatitis have been due to delay in surgical intervention.

6. To treat some of the complications of prolonged biliary tract infection and to uncover more common duct stones, the common duct should be explored and drained more frequently.
7. We should convince the patient and sometimes the physician of the wisdom of cholecystectomy when a positive diagnosis is made and the symptoms few, rather than when complications have had an opportunity to present themselves.

Intestinal Obstruction

ROBERT HARE DELAFIELD, M. D., Ellsworth, Maine

Since up until the present time some 5500 papers have been written on the subject of intestinal obstruction, it would be a task of the magnitude of cleaning the Aegean Stables to attempt a review of the literature, hence this is not the purpose of this paper nor is its purpose to advocate any particular method or methods of diagnosis and treatment, but rather to collect systematically and concisely the available material on the subject from the best available sources, and present it in the hope that it may be of use or interest to some when confronted with the problem.

As in all conditions, diagnosis assumes first place of importance in obstruction, for upon it depends in large measure the future course of treatment. It is not a matter simply of "is there an obstruction," but where, why, is it complete or incomplete, acute or chronic, and is the blood supply to the affected part embarrassed. It would seem logical to take the bowel in descending order in such a discussion.

SMALL BOWEL OBSTRUCTION

The causes of small bowel obstruction and their frequency are fairly well agreed upon, with external hernia of the indirect inguinal and femoral types far in the lead, indirect inguinal hernia being the most frequent. In a recent series Eliason and Welty reported 23% of all obstructions as due to hernia. Of these the mortality of inguinal hernia was 5%, and of femoral hernia 31%, this being indicative of the greater incidence of strangulation of femoral hernia. Dennis and Brown in 1943 reported intussusception as the next most frequent cause of small bowel obstruction, however, among most observers adhesive bands hold an undisputed second position, and are considered by many as first in importance. Internal hernias and volvulus seem to be next most important factors, and foreign bodies, mesenteric thrombosis, congenital mesenteric cysts and neoplasms follow.

The signs and symptoms of acute small bowel obstruction should be well known. Crampy abdominal pain usually ushers in the incident,

with vomiting a marked and early occurrence. Later, the vomitus becomes fecal or feculent in character, and more or less distention takes place. Tenderness is variable. Borborygmi can be heard at the peaks of the cramps. On X-ray the film usually shows the "step-ladder" appearance of distended loops of small bowel with fluid levels.

It is important from the standpoint of instituting rational therapy to determine if possible whether or not strangulation is present. If it is, temporizing with intubation is inviting disaster, and early operation is imperative. It is in the strangulated group that the mortality has dropped the least in the past twenty years.

There are no cardinal signs of strangulation. Pain is more apt to persist between cramps, the cramps merely being exacerbations of already present pain. The pain may be referred to the back, and patients can sometimes find a position in which they gain comfort, probably by relieving tension on the mesentery of the occluded segment of bowel. The onset may be abrupt and comparable to the onset of a myocardial infarction. Too, the signs of peritoneal irritation which are not usually present in simple obstruction, such as rebound tenderness and rigidity, usually appear early. Leucocytosis, though highly touted from time to time as a valuable differential point between simple and strangulated obstruction, appears too late to be of real value if proper measures of therapeutics are undertaken. Patients with strangulation become sicker more rapidly than those without.

It is in acute obstruction of the small bowel that the marked disturbance of fluid and electrolyte balance associated in everyone's mind with intestinal obstruction takes place. It has been calculated that the normal upper intestinal tract secretes from 7300 to 8000cc of fluid daily, and it is small wonder that interference with its disposition should cause trouble. The vicious cycle set up by loss of chloride and fluid by vomiting, in turn causing the accumulation of bicarbonate with compensatory elimination of sodium and its requisite water in an attempt on the part of the organism to prevent alkalo-

sis, causes rapid dehydration. The NPN becomes elevated, presumably through lowering of the effective glomerular filtration pressure, and oliguria, through prerenal deviation of water. The mechanism of protein loss in intestinal obstruction is not clear, but it is a fact that through the edema of hypoproteinemia incomplete obstruction may become complete.

It is toward restoration of fluid and electrolyte balance, or their maintenance, that prime consideration must be given. Once loss can be measured quantitatively in a balanced patient, this is not too difficult—but for the rational treatment of an acutely obstructed patient whose status quo is unknown on admission, frequent estimations of chloride, CO₂ combining power, and NPN are necessary. With strangulation, plus or minus 25% of the blood volume may be lost into the infarcted segment and peritoneal cavity in short order, requiring up to 2000cc of transfused blood to remedy the resulting shock. Once acute fluid and electrolyte imbalance has been restored, further loss must be alleviated by quantitative replacement of fluids and electrolytes removed mechanically as with a negative suction apparatus, and replacement of normal fluid and metabolite depletion must be made. This is not a new concept, since as early as 1908 Braun and Boruttau recognized the loss of fluids and electrolytes in ileus, and in 1912 Hartwell and Hoguet showed that dogs with experimental obstruction could have their lives prolonged by the use of intravenous saline solution.

NOTES CONCERNING TUBES

The use of the tube now seems to appear in its logical sequence. The idea was not a new one with Wangenstein or Miller and Abbott. The first tube we know to have been passed into the stomach was passed in 1813 by Philip Syng Physick, to wash out the stomachs of two infants poisoned with laudanum, while he was professor of surgery at the University of Pennsylvania. In 1909, a pediatrician called Scheltema in Groningen passed a tube from mouth to anus in a child after watching a fowl trying to swallow a string, the end of which had already appeared astern. It remained for Wangenstein, however, to do the work which stimulated and popularized the use of the tube for decompression in intestinal obstruction. His

first series of cases was published as late as 1933. In 1937, the Miller-Abbott tube became available, and became increasingly popular. Along with more advanced knowledge of how to deal with the fluid and electrolyte balance, it is given credit by the majority of authors for the marked decline in the mortality of intestinal obstruction since that time, as the rate has been just about halved in the last ten years.

More recently, single lumen tubes making use of a mercury filled bag in place of the original balloon have been evolved, notably by F. I. Harris and Meyer O. Cantor. These have the advantages over the original tube of Miller and Abbott of being more easily passed and of having a larger lumen with less tendency to clog.

A word should be said here with regard to the passage of these tubes—a procedure which is the bane of the house officer's existence, and one which is attended with peculiar difficulty in many cases primarily because the correct procedure is not followed. In the case of the Miller-Abbott tube when used with a balloon distended with air, the difficulty attendant upon passing the tube into the duodenum is occasioned by the fact that the tendency of the tube is to turn to the left and curl up upon reaching the cardiac portion of the stomach. The simplest method of obviating this is all too frequently forgotten, and is, after a few inches of tube have passed into the stomach, to distend that organ with 300 to 600cc of air with the patient on his or her right side so that the end of the tube falls over to be headed toward the pylorus. If at this point the air is evacuated, the tip will be held pointed correctly, and if the patient is kept on his right side it should pass with relative ease into the duodenum. If fluoroscopy is easily available it is helpful no end in guiding the tip of the tube into the pylorus, and in many institutions the passage of such tubes is the function of the X-ray department, as it is quite possible that it should be. Sometimes the use of a flexible, removable, wire stylet is helpful in directing the tip of the tube, though I have rarely found it so. The balloon should never be inflated until the tip is well into the second portion of the duodenum. If it is inflated too early, the duodenum will squeeze it back through the pylorus, and ruin the work of an hour or two. Once the balloon is inflated and the tube is on its way *it should*

never be fixed because of the danger of pleating the bowel over it. When the point of obstruction has been reached, the balloon should be deflated and the tube fixed and allowed to work.

In regard to the mercury weighted tubes it should be remembered that they are carried forward by gravity rather than peristalsis, therefore, if the patient can walk about or at least sit up in bed and move about, their passage is more rapid. Passage through the pylorus is often easily effected if the patient is placed on his right side in slight Trendelenburg position after the tube has entered the stomach. When the tube has reached the second portion of the duodenum he should be as erect as his condition allows. There is no doubt that the mercury weighted tubes are more easily passed than those dependent upon peristalsis in patients in whom a well established ileus is present.

Dearing classified obstruction in 1944 as of the following three types. The first, in which intubation alone could be used therapeutically, consisted of paralytic ileus and that early post-operative obstruction caused by new adhesive bands. The second group was that in which pre-operative intubation followed by surgical release of the obstruction was indicated, and this group contained the various types of mechanical obstruction in their early stages. The third group was those cases of obstruction in which early operation followed by post-operative intubation was indicated, and this group contained instances of strangulation and late obstruction requiring operative decompression. Strangulation almost always requires post-operative intubation because of frequent ileus and band formation.

It is generally conceded, with rare exceptions, that intubation should not be attempted in large bowel obstruction, particularly that of the descending colon, because of the length of time required for passage of the tube and the fact that in the neighborhood of 66% of ileocaecal valves are competent, rendering passage of the tube into the colon next to impossible in the face of distention. Mayo, Miller and Stalker went so far as to say that colonic obstruction must be considered a strict contraindication to the use of suction drainage, and they are borne out by many others including Thomas Russell and W. O. Abbott.

The availability of the various tubes should not mean that enterostomy is a practice to be placed in discard. There are a certain number of cases in which attempts to pass a tube inevitably lead to failure, though the percentage of success seems to be directly proportional to the amount of experience of the persons carrying out the procedure. Failure to pass a tube successfully within 48 hours after the onset of acute small bowel obstruction without strangulation calls for operative decompression. The method of choice is so called "blind" enterostomy, in which the first available distended loop is entered without further exploration. In badly debilitated patients this may be done under local anaesthesia through a muscle splitting incision. The Witzel tube enterostomy, inserting the tube without regard to direction of the fecal stream, has given better results than the Kader method without the catheter.

In summary, then, the treatment of small bowel obstruction depends on the following steps. First, and throughout the patients course, proper parenteral administration of fluid, electrolytes, and blood is of paramount importance. Secondly, decompression of the distended small intestine by tube or by catheter enterostomy is obligatory. Third, it must be emphasized that if signs of peritoneal irritation occur, exploratory laparotomy and resection of gangrenous bowel are in order regardless of the degree of distention. If following intubation or enterostomy gas appears in the colon or is passed by rectum it is a sign that the obstructing mechanism has relented. If it does not seem that the patient will benefit by operation at that time, for one reason or another, the tube may be left in 2 more days and removed. It has been stated, however, that unless the patient lives in such a place that in the case of future obstruction he could receive immediate medical attention, this conservative treatment is unwise.

In case obstruction following decompression does not relent, late operative restoration of the continuity of the bowel, after proper preparation of the patient, is in order.

LARGE BOWEL OBSTRUCTION

We now come to obstruction of the colon, concerning which the literature is just as

voluminous as in the case of small bowel obstruction, though there is a much higher coefficient of agreement among various authors in regard to cause and treatment.

Carcinoma is far and away the commonest cause of obstruction here, and accounts for a significantly higher over all mortality in this group. Extracolonic malignancy takes second place, with pelvic and sigmoid inflammatory lesions and volvulus of the sigmoid taking later precedence. The incidence of obstruction due to pelvic inflammatory lesions and in particular lymphopathia venereum, of course assumes greater importance in series from hospitals which handle large numbers of negroes.

The symptoms of colonic obstruction are essentially the same as those of small bowel obstruction, the main difference being one of degree. Because of the low point of the lesions, patients are usually free of the hypochloremia, uremia and marked dehydration associated with higher obstruction, though obstruction in the ascending colon may simulate small bowel obstruction in all its features giving rise to a very real danger in failure to recognize the possibility of rupture of the caecum. Vomiting is usually late. Early, cramps occur at intervals of 10 to 30 minutes. Later, as the entire proximal colon becomes distended, cramps occur each time the ileum empties, or every 3 to 10 minutes. As distention becomes marked cramps may be absent.

The abdomen though tympanitic is moderately soft and not tender except in the case of volvulus with strangulation. Tenderness, when it does occur is usually over the caecum, the thinnest part of the colon, a warning that the viability of the bowel is threatened by the distention.

A hint of the possibility of volvulus of the sigmoid in the rare cases where it occurs can be had through a history of life-long severe constipation, since volvulus in this region cannot occur anatomically unless a megacolon exists, in the absence of congenital malrotation of the gut. Diagnosis can usually be made by X-ray, the film showing a single distended loop with a tendency to extend to the right upper quadrant.

Treatment, with rare exceptions, is agreed to be operative — involving first decompression, and later resection of the offending portion of

bowel or palliative colostomy as indicated by concurrent findings of metastases, irreparably frozen pelvis and so forth. The criteria of operability are necessarily dependent to some extent upon the individual surgeon's capabilities.

In various hands different procedures have had markedly different results. Up to 1933, Kader type coecostomy in various hands carried about a 50% mortality. This has not been the case in the hands of other operators, notably Thomas Russell at New York Postgraduate Hospital, who preferred a tube coecostomy or appendicostomy and reported excellent results. Dennis in Minneapolis prefers, when possible, a transverse colostomy brought out through an incision across the right rectus muscle half way between the umbilicus and the xiphoid, because of the difficulty of bringing distended bowel out through a vertical incision. There is a high degree of individual preference, therefore.

It would appear, however, in these days of succinyl sulfathiazole, sulfathalidine, and streptomycin for sterilizing the intestinal contents, and non-noxious antiseptics which can be used with impunity in the peritoneal cavity, that in the hands of sufficiently trained men resection with end-to-end anastomosis will be a more frequent procedure than heretofore. It has been carried out to within 4cm. of the anal opening, giving a wide range of operability. With this in view, preservation of bowel length becomes important and procedures for decompression such as tube coecostomy rather than slack using transverse colostomy would appear to be more logical.

SUMMARY

In conclusion then, the following salient points should be noted. The last word on treatment of choice in obstruction has not yet been written. In general, it depends mainly upon re-establishment and maintenance of fluid and electrolyte balance, and decompression in the most plausible manner. The Harris tube may in the future cut down the incidence of failure to intubate in later obstruction of the small bowel with ileus. Strangulation is an indication for immediate operation regardless of disten-

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Clinical Pathological Exercise

Case Presented at the Maine General Hospital, Portland, Maine

Edited by JOSEPH E. PORTER, M. D.

This 52-year old white male meat cutter was first admitted with a chief complaint of jaundice and epigastric distress of one week's duration. He first noticed epigastric distress, which was soon followed by jaundice, dark-colored urine, nausea, and vomiting. No past history of dyspepsia or intolerance to fatty foods. Bowels have always been regular, and he has never been jaundiced before. He has been treated for arthritis of the spine, bilateral herniorrhaphy, and injection of varicose veins, date not stated. Review of systems was negative. Habits non-contributory.

Physical Examination: Temperature 99°; B. P. 120/80. Well-developed and well-nourished male, showing moderate icterus. Head was negative. Sclerae were icteric; eyes reacted to light and accommodation. Nose and ears negative. Mouth: Upper teeth in fair condition; lower teeth missing. Tongue somewhat dry and coated. Throat negative. Neck: Thyroid not enlarged; no venous engorgement; no adenopathy. Chest clear to percussion and auscultation; no rales. Heart: No thrills; border not determined. Heart sounds of good quality; regular rhythm; no murmurs. Abdomen: Liver felt about two fingers below the costal margin; non-tender. Spleen not palpated; no other masses felt. No costo-vertebral angle tenderness. Extremities normal except for a few varicose veins in the lower legs. Reflexes physiological.

Laboratory: Admission blood count: Hb. 75%, 11.9 gms.; white blood count 6,150, 70% neutrophils, 24% lymphocytes, 6% monocytes. Icterus Index 100; Van den Bergh positive immediate direct. Corrected sedimentation rate (Wintrobe) 36 mm. per hr. Urine: S. G. 1.020; alkaline; heavy orange sugar; bile 2 plus; occasional white blood cell in sediment. Fasting blood sugar 76 mg.%. Bromsulphthalein dye: 100% retention. Stool: Clay-colored; negative for occult blood and bile. Hinton negative.

On the 5th hospital day the bromsulphthalein dropped to 35% retention. The prothrombin time was 85% of normal. Icterus Index dropped to 20; white blood count 8,650, 65% polys, 35% lymphocytes. On the 7th hospital day a plain plate of the gall bladder region showed 7-8 shadows, varying from 1 to 0.5 cm. in size, lying beneath the liver edge. An oral Graham-Cole test showed no filling of the gall bladder. Chest X-ray was negative.

On the 11th hospital day a cholecystectomy was performed, and histological examination revealed chronic cholecystitis and cholelithiasis. Immediately following the operation the patient was given a unit of plasma because of a drop in blood pressure. He made a satisfactory recovery, and following a normal cholangiogram on the 10th hospital day, the "T" tube was removed, and the patient discharged on the 28th hospital day, 17 days postoperatively.

Approximately 10 weeks following discharge the patient again was admitted because of increasing jaundice. Approximately two weeks before admission he noticed that his urine was getting darker in color and his stools were becoming clay-colored. He was becoming progressively more constipated; he had no nausea, vomiting, headache, or general malaise. His appetite had been fair. He had lost about 10 pounds during the past two weeks. Following discharge he had been completely relieved from pain, and had eaten a regular diet, and considered himself in good health. He never noted blood in his stools.

Physical examination revealed his temperature to be 98°; pulse 78; respirations 20. The essential findings were skin, sclerae, and mucous membranes definitely yellowish in color. There was dullness to percussion over the right lower chest; posteriorly there were slightly diminished breath sounds, and an occasional rale. A systolic murmur was described in the apex in the pulmonic area. Abdomen: The liver was questionably enlarged, non-tender; the spleen was not felt. Cholecystotomy scar

was well-healed. Bilateral hernia scars well-healed. Rectal examination revealed a moderately enlarged prostate. The examining finger revealed a slight amount of clay-colored feces. The extremities showed mild varicosities.

Laboratory: Admission hemoglobin 96%, 13.9 gms.; white blood count 5,800; normal platelets; 64% polys, 1% eosinophils, 30% lymphocytes, 5% monocytes. Icterus Index 100; positive immediate direct Van den Bergh. Prothrombin time 60% of normal. Bromsulphthalein showed 100% retention. Sedimentation rate (Wintrobe) 15 mm/hr. Urine: S. G. 1.026; acid; light green sugar; trace of bile; 2-3 RBC.; 1-2 WBC. in sediment. Stool: Pasty, yellowish-brown; trace of bile. Total protein 6.78 gm.%, albumin 3.11 gm.%, globulin 3.67 gm.%. On the 6th hospital day prothrombin was 44% of normal; icterus index 130; sedimentation rate 2mm./hr.

During his hospital stay the patient became progressively more anorexic, taking little by mouth. Temperature remained normal until the 8th hospital day, at which time it became elevated to 102.2°. He became more lethargic and gradually lapsed into coma on the 7th hospital day, despite parenteral vitamins, liver extract, parenteral fluids, glucose, and parenamine. After a progressively downhill course, the patient quietly expired on the 8th hospital day.

* *Dr. Chester Jones:* The episode which involves the first half of this case is a reasonably simple statement of facts, with no complicating factors. One thing unusual is that a man comes in jaundiced, with gallstones, but no pain, and complaining of little distress. Other than that, one previous acute episode of distress; no particularly striking physical signs, and a lucky X-ray which demonstrated calculi in the region of the gall bladder; "lucky" because the average X-ray shows gallstones, when the gall bladder doesn't fill, only in a very small percentage of cases. When the gall bladder fills, the percentage of stones demonstrated is very high.

There was complete obstruction for a short time, and clay-colored stools. Laboratory tests indicated nothing more than obstruction. It is also evident that the obstruction was apparently only temporary, as the jaundice diminished.

* *Dr. Chester Jones,* Clinical Professor of Medicine, Harvard Medical School, Boston, Mass.

His Icterus Index dropped from 100 to 20 in 5 days, as the jaundice diminished, and the bromsulphthalein test dropped from 100% retention to 35%. It would, therefore, seem reasonable to put it on a mechanical obstructive basis. There is no reason to doubt the presumptive diagnosis of gallstones causing biliary colic. What isn't stated here is the fact that at operation gallstones were not found in the common duct; in all probability no stones were present in the common duct. One can have jaundice with gallstones present only in the gall bladder. It occurs, as a rule, in association with cholangitis, usually with some elevation of temperature, and moderate leukocytosis. In this case there was no elevation of temperature (99°), no leukocytosis, and no increase in neutrophils. One has the right to wonder whether or not there was hepatitis and gallstones at the same time. Exploration of the gall bladder and the common duct, and cholecystectomy was the proper therapeutic procedure. The diagnosis was made correctly and the proper things were done, with one exception, that is, the administration of plasma. There was no justification for its use. I think that the danger is so great from the use of plasma from any source, that we should not use it. As a general rule, unless the emergency is very great, whole blood from donors, rather than plasma, is the treatment of choice.

Another important point, the cholangiogram was normal. It is not a common practice to do a cholangiogram. Your practice here of performing a postoperative cholangiogram is very wise. I don't see how any surgeon can be certain that there are no stones in the ducts. He must be fortunate as well as skillful to find all calculi with fingers or probes. The added information to be obtained by cholangiogram is very worthwhile, in order to reassure the surgeon that nothing has been left behind. If anything has been left behind, that leaves the surgeon with the problem of elective surgery at a later date. If it were possible to do the cholangiogram on the table, that would be even better. This is excellent routine procedure.

At the end of ten weeks the patient was again admitted because of increasing jaundice. Physical examination at this admission was really no different than on the preceding admission, except possibly that the jaundice was a little more intense. Laboratory findings were

not much different either. This is the type of situation we have encountered in the past one or two years, and will continue to encounter periodically. I would hazard a guess that probably the number of cases three or four years from now will be less than at the present time. This presents a very interesting situation, in which an operation has been done for a perfectly proper reason, and at the end of ten weeks after the operation the patient comes in again with jaundice, and again without pain. There were one or two differences in the data which are of some importance. On the second admission there was a relatively low white count, with a relatively low neutrophil percentage, and a relatively high lymphocyte count. This implies that there may be an infectious hepatitis. Furthermore, during his stay in the hospital, the prothrombin dropped from a 60% normal to a very low figure of 44%. During eight days his jaundice increased the icterus index from 100 to 130. One other fact — his serum albumin was not normal; 3.11 gm.% while eating and feeling well is abnormally low. His liver was not functioning properly in several of its most important functions. There are two diagnoses to consider: Was there a stone left in the common duct, so that we again had an obstruction? Or has this man now acquired intrahepatic disease, as a basis of his second attack of jaundice? In favor of the latter is the absence of fever, the presence of leukopenia, and a certain amount of evidence that intrinsic liver functions are involved. Obstructive jaundice due to gallstones does not produce any material damage to the liver until it lasts a long time; lasting only for a week or two there should be no particular disturbance in the hepatic function. The patient's prothrombin time dropped from 60% to 44% in the course of a few days. He was, I would assume, receiving a fairly energetic course of treatment during the eight days in the hospital, but became worse in spite of the therapy. He had a negative postoperative cholangiogram, which is a valuable bit of evidence against a surgical condition producing extrahepatic block. The common duct might have been traumatized, but the evidence is all to the contrary.

This man received plasma ten weeks before becoming jaundiced, and we know that this may provide a very definite cause of trouble within the liver. I believe that this man had

so-called homologous serum jaundice with severe damage to the liver, which produced complete hepatic failure and death. If that is true, one should expect to find a great deal of damage to the liver cells, involving a great part of the liver. The incubation period is just about right. Experimental work done by Stokes and his group in Philadelphia has established beyond doubt this period to be somewhere around 3 months, varying from 6 to 8 weeks to 12 to 15 weeks. This man developed jaundice within 8 weeks. There is the possibility that the plasma contained the infectious agent causing serum hepatitis. This is particularly true of commercial plasma, where there are lots of donors in a pool, and where the possibility of one or more of the group in the pool harboring the disease is great. The disease is communicable only by the administration of infected plasma or blood, so far as we can determine, or by the use of infected syringes or needles. The Army recently issued a flat order that every single needle or syringe had to be autoclaved before being used. So, the danger is being recognized in various parts of the country and the armed services are taking it seriously. In the Massachusetts General we have had a certain number of patients from our own and from other hospitals where plasma has been administered postoperatively, with the subsequent development, in about 3 months, of jaundice and infection of the liver. I don't know the exact figures. It probably represents a virus infection of the liver, and some statistics indicate a mortality as high as 10%. In this case, the virus was probably a similar virus. The mortality in epidemic infectious hepatitis is very much lower, but the disease is capable of producing chronic liver disease or death. This man died of hepatic failure, but not for a moment do I believe that it was from a growth or stone that had lasted 2-3 weeks. As far as treatment is concerned, there is no specific treatment for this type of case. Treatment of liver disease is one of replacement, if the liver is not too hard hit. If it is too hard hit, there will be extreme necrosis of the liver, with ultimate death. As far as we know, the only therapy that is of any value is the replacement of enough calories and protein to help in the repair of the body. Use of vitamins is alright, but possesses no virtue: it only makes the doctor feel better. An adequate diet is more important.

Dr. Joseph Porter: Is there any further discussion of this case?

Dr. Von Baren: I would like to now how you explain a direct Van den Bergh in this case.

Dr. Jones: Your direct Van den Bergh is supposed to be due to direct regurgitation jaundice, with backing up of bile into the blood stream due to a rupture of blood calculi. If you have enough destruction of liver cells you can get this reaction taking place, and it is very common to get a high direct Van den Bergh.

Dr. Von Baren: In those cases doesn't the Van den Bergh become more acute?

Dr. Jones: I think that is true. It doesn't answer your question completely, but I think that what I said and what you said are both correct. It is entirely true that a direct Van den Bergh doesn't mean extrahepatic obstruction. I think probably that one could add that only a direct Van den Bergh, with no other test, is of very little diagnostic value. The only time when it is of real value is in differentiating between hepatic disease or obstruction on one side, and jaundice due to blood destruction on the other.

D. Porter: I think we feel also that a quantitative direct Van den Bergh is of no significance without doing an indirect Van den Bergh.

Dr. Jones: In any hemolytic crisis, you get a high indirect value.

Dr. Philip Thompson, Jr.: Do you know of any recent work done, in using the plasma that is piling up in the hospitals?

Dr. Jones: As far as the commercial preparation is concerned, I don't know. The Red Cross has called in a large percentage of the old plasma. That is being reprocessed in such a way that they are preparing albumin and globulin fractions for use in hemophilia, etc., and some is being prepared for experimental use. At the present time the Red Cross is distributing a certain amount of these different products to different groups in the country to see how valuable they are, at the same time solving the problem of serum jaundice in this fashion. Wherever any of that material is used, a report is to be made immediately, and a follow-up report as to whether the patient became jaundiced if it was used.

Dr. Thompson: If you have some plasma

on hand, it would be better to save it for a later date, then, in case they want to process it?

Dr. Jones: I myself would ask the American Red Cross what to do with it; I wouldn't use it.

Dr. Porter: Do you know whether you can prevent homologous serum jaundice with gamma globulin?

Dr. Jones: No, I don't. I asked Dr. Jane-way about that not long ago, and I think nobody has had experience with it.

Dr. Jones' Diagnosis:

Hepatitis (Homologous Serum Jaundice).

Anatomical Diagnosis:

Acute hepatitis, with severe icterus.

Cholecystectomy.

Pulmonary congestion and edema.

Dr. Porter: This man died of liver failure due to very marked and diffuse hepatolysis. The liver was very soft, dark reddish in color, and very friable. On microscopic study it showed slight regeneration of the bile ducts, and liver cells, and extensive destruction of liver cells. There was no obstruction of the common bile duct, but it was thought to be slightly dilated and its wall slightly thickened. In the past two years we have observed seven similar cases following the use of plasma; one other case besides this one terminated fatally. It is my impression that this is an example of so-called homologous serum jaundice or hepatitis.

Dr. James Parker: The other case had a gastrectomy for carcinoma of the stomach. Plasma was used during his hospitalization. Another physician had seen him 12 weeks post-operatively. He developed jaundice and died in a few days. At the same time there was one other patient with cancer of the rectum, who received plasma. He developed jaundice at home, improved without medical supervision, and came to see me at the office, apparently having recovered from it.

Dr. Jones: There is a tremendous difference in the plasma pools. At the present time the number of donors in commercial plasma pools is very large. It seems to me that there is no real excuse for using plasma except as an emergency measure.

Dr. Porter: We have stopped using commercial plasma since the Spring of 1947.

The President's Page

Am I My Brother's Keeper?

You may wonder why this question in a Medical Journal. I think that it has been pretty well established, that we in America should do everything in our power to assist, and aid the other democratic peoples of this earth who believe in our way of living.

Recently there has been a lot of publicity in lay newspapers, and even on the stage and screen, on the fact that it is almost impossible to get a Doctor at night. The big cities say there are plenty of Doctors, but none that will make calls. The proponents of Socialized Medicine are using the argument, that under their system, there would always be a doctor ready to go night or day. Of course, we know this a fallacy, because there are not enough Doctors to go around in the Federal set-up. One of the bad features of Socialized Medicine, and the Panel system, in the European Countries who practice this sort of medicine is, that it is impossible to get doctors at night.

Legally, a doctor does not have to make calls on any patient that he has not contracted to treat. Morally, however, Doctors in a community are supposed to take care of the emergencies in their neighborhood. In these days of highly specialization, and the growing shortage of General Practitioners, together with the fact that most Doctors work a much longer day, than the so-called Union hours, it is not to be wondered at that the M. D. is reluctant to get up at night and go treat a patient that he has never seen before.

The Medical Profession, however, has through the years been proud of the fact that it has always taken care of the Health of the Country irregardless of time or money. I am sure that the vast majority of Doctors in the History of America went into the practice of Medicine, not for the purpose of getting wealthy, but more to do good in the sphere or community in which they elected to practice.

We can by organization, in our societies, and communities, have some kind of a system, whereby Doctors can be located at night. Physicians' exchanges now list Doctors that are available for night calls. Older Physicians in communities, should bargain with the younger men, to take care of their night work.

It is a known fact that the vast majority of calls at night could well wait until morning. However, when Mr. John Q. Public makes up his mind that he needs a doctor, he immediately makes it an emergency. The shortage of doctors during the war did much towards eliminating needless night calls. However, this fact is becoming a serious problem all over the Country. If you can't answer night calls, you may be able to suggest some Doctor that will.

If we plan to lend assistance to the freedom loving people of the world, we must take care also of our neighbors at home.

I believe the answer to the question is yes, and I am sure I will be practicing the Golden Rule.

STEPHEN A. COBB, M. D.,
President, Maine Medical Association.

Editorials

End Division Between Civilian, Military Medicine— A. M. A. Head

Dr. Bortz Urges Overall Medical Program To Guarantee Best Performance By Doctors In Peacetime And War

Bethesda, Md. — In a speech on "Medical Preparedness," Edward L. Bortz, M. D., Philadelphia, president of the American Medical Association, today called for an overall medical program to end the division between civilian and military phases of medicine and to guarantee a high level of performance of the medical profession in both peacetime and war.

Dr. Bortz spoke before the U. S. Naval Medical School, National Naval Medical Center, Bethesda, Maryland.

"The methods of modern warfare have eliminated any boundary between civilian and military forces so far as preparedness is concerned," he said. "Thus far there is no official coördinating agency which is responsible for the formulation of a plan of action specifically dealing with the medical needs of the nation."

Frequent conferences between the A. M. A.'s Council on National Emergency Service and high-ranking civilian and military officials of the government have already been "mutually beneficial," Dr. Bortz said. But the lessons of the last war prove that further coördination is necessary. He pointed to a particularly urgent need for:

1. Coördination of hospital construction plans.

2. A common system of supply and distribution.

3. The common use of specially trained personnel and technical equipment as a stimulus to research programs.

4. Medical representation on the National Security Council, the National Security Resources Board, the Munitions Board, the Research and Development Board, and with the joint Chiefs of Staff.

"Many patriotic citizens have in the past been disturbed at the wide disparity apparent in the

recruitment, organization, training programs and other activities of the various medical components of the armed forces," the A. M. A. president also observed.

"Another issue of importance today is the loss by retirement of medical officers at a time when their services are of inestimable value in maintaining the strength of the Medical Corps.

"At present there is a recognized shortage of medical officers. All branches of the service are experiencing this predicament. This is a problem that needs the utmost consideration, not only on the part of regular medical officers, but of medical educators and civilian leaders. It may be advisable to create a specialty board for military medicine under the joint auspices of the American Medical Association and the Offices of the Surgeons General and the Air Surgeon. Such a board might establish standards that would be helpful in the maintenance of a continuing high quality of professional skill and experience within the medical services.

"The Medical Departments of the Army, Navy, and Air Corps are in a particularly advantageous position today for studying problems of atomic energy. It is a hopeful sign that departments of research in civilian institutions are working in close collaboration with the research centers of the armed forces. As a closer rapport is brought about, the division between the civilian and military phases of medical science should be reduced to a minimum.

"High ranking medical officers in conference with outstanding civilian medical authorities should frankly analyze the suggestions which have been made about the limitations of opportunities for medical advancement in the services in order that these obstacles may be minimized or eliminated entirely.

"Many talented younger men might become available for service in one of the medical corps

if some method could be devised to subsidize their education. This suggestion would offer the opportunity for competitive examinations, and students might be selected by a board which would include civilian authorities, faculty advisors, and representatives from the office of the Surgeons General."

In conclusion, Dr. Bortz called for a National Emergency Medical Council that would have official status and become an agency of the National Security Resources Board. "This council should be responsible for the creation of an overall medical program that would guarantee a high level of performance of the profession in peacetime and in war," he stated.

"Indeed, it is not too much to hope that the

dividends from medical research in support of a higher level of health for our people might be one of the most powerful forces in behalf of more stable international relationships. The forces of government today should emphasize the benefits to be derived from positive humane application of atomic energy rather than stressing the destructive possibilities.

"As citizens of a great nation and members of a great profession, we stand at the dawn of the atomic era with unparalleled opportunities for bringing about benefits to mankind in the realm of health and medical service that will transcend the highest hopes of our forefathers, and which may ultimately extend to the far corners of the earth."

Annual Session Program

The Scientific Committee has made the following additions to the program as outlined in the March issue of the Journal (Page 64):

Chairman for the Monday morning conference will be Carl Richards, M. D., Sanford. Program to be announced.

Monday afternoon, Medico-Legal Conference. George L. Pratt, M. D., Farmington, Secretary, will be in charge of the program.

Tuesday morning conference will be a symposium on hypertension, with round table discussion. Theodore E. Hardy, M. D., Waterville, Chairman. Participants in this conference will be:

Wilfrid J. Comeau, M. D., Bangor—Cardiology

Howard F. Hill, M. D., Waterville—Ophthalmology

Joseph Memmelaar, M. D., Bangor—Urology

Kenneth W. Sewall, M. D., Waterville—Obstetrics

Gilbert Clapperton, M. D., Lewiston—Anaesthesiology

George F. Maltby, M. D., Portland—Neurosurgery

Tuesday afternoon in addition to the President's Address, there will be the following speakers:

H. R. Lester, M. D., Surgical Staff, Bellevue Hospital

Vincent T. Lathbury, M. D., Psychiatrist at the University of Pennsylvania

Harold E. Small, M. D., Augusta

Maurice Ross, M. D., Sanford

Tuesday evening at the Annual Banquet Rev. John Nicol Mark of Arlington, Mass., widely known Scotch lecturer and humorist, will be there in addition to Major General Hershey.

The Program-in-Brief will be published in the May issue of the Journal.

A special program is being arranged for the ladies.

Cancer Institute

The Maine Cancer Society extends a cordial invitation to the members of the medical profession to attend its Cancer Institute to be held at Roberts' Union, Colby College, Waterville, on Wednesday, May 5, at 2.00 P. M.

The principal speaker at the medical session will be Frank E. Adair, M. D. Other speakers of national prominence will discuss medical and scientific aspects of cancer. A special program of interest to the laity is being planned for physicians' wives, guests of the society and volunteer workers.

The program will be climaxed by a dinner which will be an open meeting at which problems and projects of interest to physicians will be discussed.

FORREST B. AMES, M. D.,
Program Chairman.

*Army Doctors Say Mass Hysteria Need Not Follow Atomic Bomb Explosion**

If an atom bomb should fall on an American city, the population would be faced with the greatest emergency in its history. But, it is by no means true that the entire population would be wiped out, nor is it true that nothing could be done to help the survivors, according to Army Medical Corps officers who are conducting continuous study of the problem.

There is no presently known method of protecting those in the immediate neighborhood of an atomic bomb when it explodes. Nevertheless, since the Los Alamos experiment opened the Atomic Age, a great deal has been learned about mitigating the secondary effects of ionizing radiation and about protecting survivors who have received less than a lethal dose.

Many lives may be saved by widespread knowledge of therapeutic measures among physicians, and many more by a general understanding of preventive measures which can be taken by the general population.

In a talk made at the Pennsylvania University Hospital, Philadelphia, Col. James P. Cooney of the Army Medical Corps stressed the question of civilian morale. "Mr. and Mrs. America have been so frightened by the information they have received to date, that if a bomb were dropped on one of our cities tomorrow, mass hysteria would probably cause the unnecessary loss of many lives," Colonel Cooney said. "Mr. and Mrs. America have always been ready and willing to do what must be done in an emergency, and will, if properly instructed beforehand, do the right thing under this new kind of stress."

The real difference between ordinary high explosives and atom bombs is the enormous amount of radiant energy produced by the latter—energy covering the whole range of wave lengths from heat waves to million-volt gamma waves.

The radiant energy may be divided into two types: ionizing and non-ionizing. The most important type of injury noted in Hiroshima and Nagasaki was, of course, that due to the ionizing component of the radiant energy from the bomb. Four known kinds of penetrating

radiation can be expected within the immediate area of the blast. They are:

First, gamma radiation, which is essentially the same as X-ray. In an atom bomb explosion, however, these are 200,000,000 volt X-rays. They are lethal to anyone within roughly a mile of the blast, do serious damage to those as close as a mile-and-a-half, but their range is limited to approximately two miles. They move with the speed of light and most of them are produced at the instant of explosion.

Second, neutron beams, streams of heavy atomic particles shot out in all directions within a millionth of a second of the explosion. They have slightly less range than gamma rays. Both gamma rays and neutron beams passing through matter such as blood, bone or flesh, produce extensive ionization of the atoms which make up body cells, which results in the breakdown of chemical bonds, causing profound alterations in cellular function. The fact that some kinds of cells, such as certain types of cancer cells, are affected more easily than others is the basis of radiation therapy. Whatever damage is done in this way is instantaneous, although observable symptoms may not appear for some time.

Neutron beams, however, have another effect, new in medical science. Neutrons are captured in elements contained in human cells, producing new elements which are themselves radioactive, and may remain so for a long time.

Third, are beta rays, streams of electrons which rarely penetrate the skin and whose effects will be found chiefly on the surface; and,

Fourth, are alpha particles, the nuclei of helium atoms, which do not get through the cornified, or horny tissue, layer of the skin. Because of their low penetrating power, it is not likely that either the beta rays or the alpha particles resulting directly from the explosion will cause fatal injury.

It must be admitted, Army doctors say, that there is not much even a medical man can do about the immediate radiation from an atom bomb explosion. But in such an eventuality the immediate requirement will be for rescue work on a large scale and treatment for frac-

* From the Department of the Army, Office of the Surgeon General.

tures, contusions, lacerations and burns. Here physicians and laymen will be on familiar ground. These kinds of injuries are the same whether produced by an atom bomb or a block buster; they involve no new principles.

Also, some aid may be given to victims of many sorts of secondary radiation dust spread by the explosion, radioactivity caused by neutron captured by atoms, or radioactive spray if the bomb is dropped in water. Against this secondary radiation, various safeguards can be provided, and it is essential that physicians be trained in safety measures. Army, Navy and Atomic Energy Commission scientists, as well as civilians interested in radiation therapy, are hard at work on the problem and substantial progress is being made. One important line of research is in the efficacy of blood transfusions, since it has been established that one of the most serious effects of radiation is damage to the blood-forming elements such as the bone marrow. A person tidied over until normal function is resumed may be saved.

A major function of the physician after such a disaster would be to act as public health officer. Most food in the affected area would not be unfit for consumption, but it would all have to be surveyed before it could safely be eaten. All the water in the region would probably contain radio-active isotopes, slow poison to anyone drinking it, but research is in progress on methods of removing radio-active substances. Obviously the usual boiling or chlorination would be useless. There is some indication that filtration and other methods can be developed.

Physicians would have a heavy responsibility in supervising the decontamination of not only food and water but of refugees, by means of complete change of clothing, bathing, etc. This requires familiarity with the use of detecting instruments such as the Geiger counter, and a knowledge of the kinds of persistent radiation to be expected. (People escaping from the area where a bomb has exploded may find their wearing apparel sufficiently radio-active to constitute a menace to others.) This problem has already come up in hospitals where patients are being treated with large amounts of radio-active material.

Armed Forces medical officers face an even greater responsibility than do civilian physicians, since it may be necessary to send troops

into a bombed area either for rescue work or on tactical operations. A series of intensive courses on the medical aspects of atomic explosion was instituted last May at the Army Medical Center, Washington, D. C. Nearly 700 doctors and scientists have been trained there in the fundamentals of radiation hazards, diagnosis and treatment. More than 50 medical schools throughout the country have sent representatives, many of whom are now setting up similar courses in their respective institutions.

Following the bombing of Hiroshima and Nagasaki, much was learned of what symptoms to expect, overt and latent, immediate and delayed. All the results will not be in for years, of course. Great publicity has been given to the possibility of gene mutations which might produce a high percentage of abnormal offspring in generations to come. However, Dr. Shields Warren, Assistant Professor of Pathology at the Harvard Medical School, recently told Army doctors attending the current basic science course at the Army Medical Center, Washington, D. C., that aberrations in the genes and ova of mammals produced by irradiation are usually lethal to the developing embryo, and consequently the result of such irradiation would probably be a higher rate of abortion and miscarriage rather than production of a race of monsters pictured in sensational prophecies.

Besides flash burns from enveloping hot gases, such as result from any powerful explosion, blisters similar to skin burns and sunburn are likely to appear on the skin of atom bomb victims. In Japan, burns and blisters appear to follow a definite pattern, showing up within five minutes on those close to the explosion. At nearly a mile away, they did not show for several hours, and at greater distances, up to about two miles, the appearance of burns and blisters was even longer delayed.

Of the superficial effects perhaps the most alarming is the falling out of the hair. While bound to cause a bad psychological effect, it is due to superficial radiation and is not serious in itself. The hair will return if the patient has not received a lethal dose of radiation.

Immediately after a bomb blast those in the

Continued on page 115

COUNTY SOCIETIES**Androscoggin**

President, Paul R. Chevalier, M. D., Lewiston
 Secretary, Glidden L. Brooks, M. D., Lewiston

Aroostook

President, Gerald H. Donahue, M. D., Presque Isle
 Secretary, Clyde I. Swett, M. D., Island Falls

Cumberland

President, Harold J. Everett, M. D., Portland
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Hancock

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York

President, Paul S. Hill, Jr., M. D., Saco
 Secretary, C. W. Kinghorn, M. D., Kittery

County Society Notes*100% Paid Membership for 1948***Piscataquis County Medical Society****Waldo County Medical Society****Oxford County Medical Society****Cumberland**

The regular meeting of the Cumberland County Medical Society was called to order by its president, Dr. Harold J. Everett, at the Eastland Hotel, Portland, at 8.00 P. M., March 25, 1948. The meeting was preceded by dinner.

Resolutions on the death of Dr. George A. Tibbetts were read by Dr. William Holt. It was voted that a copy be sent to the widow and that they be spread upon the records of this society.

Dr. Donald Marshall reported on the progress of his committee concerning the essay contest for high school pupils sponsored by the Cumberland County Medical Society and the Association of American Physicians and Surgeons. It was voted unanimously by the society that Dr. Marshall be authorized to offer a \$50 prize for the best local essay on "Why the Private Practice of Medicine Furnishes This Country with the Finest Medical Care." He was also authorized to advertise this in the local newspapers.

Mrs. Lloyd Haley, Director of the District Nursing Association, requested the names of members of this society who are internists or general practitioners. The purpose of this list is to offer the names of such doctors to such individuals who have had survey X-ray films taken as a part of the activity of the Department of Health, Division of Tuberculosis Control, in order that the report on such X-rays be sent to the physician, and in order that the patient may be properly advised.

One of the weekly secretary's letters from Dr. George F. Lull, Secretary of the American Medical Association, was read. This letter concerned the widespread criticism of the medical profession because of the inability of the general public to obtain the services of physicians at night. The letter urged that county societies endeavor to correct this. After considerable discussion, Dr. McManamy made a motion that a committee be appointed to study the problem of giving adequate coverage of night calls. The chair appointed Dr. Thomas Foster as chairman of such a committee.

Dr. Eugene Drake, Chairman of the Committee on Prepaid Medical Care Plans of the Maine Medical Association, outlined the work of his committee up to date, and informed the society that a plan will be presented to the delegates to the Maine Medical Association at the June meeting. Such a plan would allow various insurance companies to sell insurance on a

competitive basis to cover certain professional fees. Discussion of Dr. Drake's plan was withheld until the next meeting, at which time it was hoped that the delegates from the Cumberland County Medical Society will be instructed as to the wishes of the society.

Dr. Laszlo Ormandy was unanimously elected to membership in the society, and the application of Dr. Horace Sowles for transfer from the Massachusetts Medical Society was unanimously approved.

The resignations of Dr. Albion H. Little and Dr. Maribel H. Walker were read. A discussion followed as to electing them to honorary membership, and since there are no provisions in the constitution for honorary membership, it was moved by Dr. Hawkes that the By-Laws be amended by adding to Chapter I another section which shall read: "Section II: A physician resigning after 25 years active membership may by two-thirds affirmative vote at a regular meeting be elected to associate membership. Such a member is entitled to attend the society meetings, but shall have no vote, and shall not be assessed for dues. Associate membership does not carry any right to participate in the national association." This amendment and the resignations cited above were laid on the table.

A letter from Dr. George Loewenstein concerning his ignorance of the source of the recent newspaper publicity directed to him was read.

The principal paper of the evening was given by Dr. Sidney Farber, Professor of Pathology at the Harvard Medical School, and pathologist-in-chief at the Children's Hospital in Boston. His paper was entitled "Tumors of Children." He gave a brief statistical summary of the relative incidence of tumors in children and adults, and showed numerous cases of varying types of tumors, to illustrate the nature of this condition in children. He struck a hopeful attitude with reference to the ultimate outlook if adequate treatment is employed. He pointed out that it would seem feasible, from their experience at the Children's Hospital, that by and large surgical removal of a tumor be preferred whenever possible, rather than any other form of treatment. With reference to renal tumors, there were 4 important points which he wished to stress: (1) The avoidance of unnecessary manipulation and palpation of the mass before operation, in order to prevent metastases. (2) Complete operative removal if possible, after a brief organized study of not more than 48 hours. (3) The surgeon should have a thorough knowledge of the aspects of surgical technique. (4) Evaluation of the advisability of X-ray therapy prior to operation, if a study of the case would indicate that probably X-ray therapy will make the operative procedure easier. Dr. Farber then discussed chemotherapy of tumors, including the nitrogen mustards, urethane, encouraging results with the use of the polysaccharides, and finally, the studies at the Children's Hospital using the various folic acid conjugates. The Children's Hospital is in the process now of organizing a long-range study of the effectiveness of the various folic acid conjugates, some of which have been shown to be of definite value in retarding and even destroying certain tumors.

His paper was enthusiastically received by those present, and was discussed by Drs. Porter, Thomas Foster, Donald Marshall, Langdon Thaxter, and Louis Asahi.

Respectfully submitted,

JOSEPH E. PORTER, M. D.,
Secretary.

Hancock

A meeting of the Hancock County Medical Society was held at the Hancock House, Ellsworth, Maine, March 10, 1948. The meeting was called to order by the President, Dr. M. A. Torrey. Minutes of the previous meeting were read and approved.

Dr. Raymond E. Weymouth, of Bar Harbor, presented a case of Carcinoma of the Esophagus and Cardia.

Dr. M. A. Torrey presented a paper on "Peroral Endoscopy."

Respectfully submitted,

ROBERT H. DELAFIELD, M. D.,
Secretary.

Kennebec

The regular meeting of the Kennebec County Medical Association was held February 19, 1948, at the Augusta House, Augusta, with 43 members and guests present.

Dr. Harold E. Small presided in the absence of the President, Dr. William L. Gousse.

Supper at 6.30 was followed by business at 7.30. The record of the preceding meeting was approved. Dr. Anthony Lepore of Gardiner was elected to membership. Dr. Charles D. Cromwell's resignation was announced.

Dr. Chester Keefer, the speaker of the evening, spoke on "Penicillin and Streptomycin in the Treatment of Infections."

Among many other facts he gave the following — Sodium and calcium penicillin are nontoxic, indicated in all staphylococcal infections—clostridia—all hemolytic streptococcal infections, and a long list of others.

The intramuscular route is the one of choice, dosage varies from 100,000 units per day. It is excreted rapidly by the urine. There is no such thing as an overdose.

A small number become hypersensitive, urticaria develops in about 2% after systemic treatment of two weeks or more.

It has exceeded our highest hopes as a chemotherapeutic agent. There is no other known chemical so powerful against bacteria and so harmless to the host.

Bacteria do not develop fastness to penicillin, if they are "fast" they are so at the beginning.

Streptomycin—the intramuscular route is the one of

Continued on page 116

MILESTONES IN CARDIORESPIRATORY HISTORY



Aretaeus

OF CAPPADOCIA (1st Century A.D.)

*First accurate description of asthma;
separated asthma from orthopnea.*

*"If heart be affected,
the patient cannot long survive."*



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In the treatment of bronchial asthma, the clinical usefulness of Searle Aminophyllin is well established. Its value in patients who do not respond to epinephrine or in those in whom epinephrine is contraindicated has been stressed repeatedly.

SEARLE AMINOPHYLLIN*

—is accepted therapy also in congestive heart failure . . . paroxysmal dyspnea . . . Cheyne-Stokes respiration.

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*Searle Aminophyllin contains at least 80% of anhydrous theophylline.

Necrologies



*James Webster Loughlin, M. D.,
1871-1947*

Doctor Loughlin was born in Brooklyn, N. Y., September 6, 1871, and attended the Public Schools of that city. He graduated from Bowdoin Medical School in 1900. He had been much attracted to the State of Maine and practiced in Bristol and surrounding towns for several years, then spent four years in Oregon and returned to Maine to settle in Newcastle which became his permanent home. At the outbreak of World War I he entered the Army Medical Corps as First Lieutenant, subsequently being promoted to Major. He served at Camp Wadsworth, S. C., at Camp Devens, Mass., and overseas with Evacuation Hospital, No. 37, in France in command of that Hospital.

After the war he returned to Newcastle and was appointed District Health Officer for Sagadahoc, Lincoln, Knox and Waldo Counties, in which position he served until his retirement.

At the beginning of World War II he was commissioned Colonel, inactive.

In 1899, he married Miss Maud Raviden, who survives.

As usual the bare recital of Chronological data gives little hint of character and standing. Dr. Loughlin's outstanding characteristics were perhaps force and energy.

He was always much interested in the State and County Societies and rarely missed a meeting. He

was widely known among the profession in the State.

A trustee of Lincoln Academy, his advice was always forceful, practical, and sane.

Dr. George H. Coombs who was closely associated with him in his work in the State Department of Health pays him this tribute:

"Forty-five years of close friendship and association with Dr. Loughlin ended with his passing, yet memory of him and his work will always be with me, bright spots to look back upon.

As a family Doctor he was tireless, careful and much appreciated by his patients.

As a District Health Officer, he soon became a most valuable worker in the State Department of Health, in which service he gave notable contribution to its problems, resigning at the end of 25 years for a much needed rest.

As a co-worker he was most dependable, his careful study of the work aided very much in reduction of the morbidity and mortality rates in Maine, while his kindly dignity helped to uphold the value of the State Health service to its people.

Long will his work and service be remembered by those who knew him and had the privilege of working with him."

R. W. BELKNAP, M. D.,
R. E. STETSON, M. D.

George Alton Tibbetts, M. D., 1887-1948

George Alton Tibbetts, M. D., 60, Surgeon, died at his home, South Portland, Maine, February 21, 1948.

Dr. Tibbetts was born in Gardiner, Maine, May 16, 1887, the son of George Lincoln and May Bell Flanders Tibbetts.

He was graduated from Bowdoin College in 1912 and from Bowdoin Medical School in 1915. He served his internship in the Maine General Hospital, 1915-1916. He practiced in Portland, Maine, until World War I. He enlisted in the First Maine Heavy Field Artillery (Milliken Regiment) but was transferred to the 101st Infantry two months later. The 101st went overseas early so that Dr. Tibbetts was one of the few Surgeons from Maine who served with active combat units. He was retired from the service as a Major in 1919 when he resumed his practice in Portland. For a time he was actively associated with the Veterans' Bureau locally. In 1922, he was appointed to the surgical staff of the Maine General Hospital where he served for twenty-five years with distinction

and without interruption until he resigned in 1946 to become a member of the consulting staff. At the time of his resignation he was a Senior Surgeon. He continued in active practice until his death.

Dr. Tibbetts was a Fellow of the American College of Surgeons, a member of the New England Surgical Society, the American and Maine Medical Associations, the Cumberland County Medical Society and the Portland Medical Club.

In the death of Dr. Tibbetts the medical profession of Maine has lost not only one of its ablest surgeons but also one of its most highly regarded members.

Dr. Tibbetts is survived by his mother, Mrs. May Bell Flanders Tibbetts of Portland; his widow, Mrs. Mabel Hughes Tibbetts, South Portland; a daughter, Mrs. Eleanor Ferguson, Stoneham, Mass.; a son, George A. Tibbetts, Jr., Cape Elizabeth, Maine; a sister, Mrs. Grace Jones, Portland; two grandchildren, Pamela Ferguson, Stoneham, Mass. and Stephanie Tibbetts, Cape Elizabeth, Maine.

Correspondence

April 7, 1948.

To Ye Officers, Delegates, and Members of the Maine Medical Association:

The writer wishes to extend to you his very great appreciation of your kindly services in presenting his name for the General Practitioners Award of the American Medical Association.

However, even though the award went elsewhere, it is a most happy feeling that is mine when I recall the kindly intentions of all of you.

I assure you my later years will be much brightened by your efforts.

GEORGE H. COOMBS, M. D.,
Waldoboro, Maine.

Army Doctors Say Mass Hysteria Need Not Follow Atomic Bomb Explosion—Continued from page 110

vicinity who escape immediate death from shock, burns or falling debris may appear to have suffered no ill effects at first. But within a few hours, victims seriously affected will feel nauseated and start to vomit. This may pass in a day or so. But at the beginning of about the second week when the hair starts to fall out, the feeling of general malaise, experienced in the first few hours, may return accompanied by fever. There is likely to be bloody diarrhea. Examination will show that the white blood count has fallen to a very low level. Death may come very quickly, or there may be anemia and general debility over a long period with eventual recovery.

Physicians must be prepared to expect such a syndrome and to take nothing for granted

about the condition of the patient during the first few days.

There is a parallel in our experience with heavy bombing of cities from the air in World War II. This type of warfare was an innovation, and at first physicians had virtually no information concerning the effect of shock waves of that magnitude on the human body. Scores of people in the neighborhood of bursting bombs died, although they had apparently suffered no injuries. The knowledge of what could be done to save those people was acquired the hard way because medical science had not foreseen such a problem.

The threat of the atom bomb is at least now recognized and we have already a growing body of knowledge which can be mastered while an emergency is still remote.

County Society Notes—Continued from page 112

choice—excreted by bile and urine. Has had some success in treating tuberculosis—effective against tularemia, influenza, urinary tract infections, bacteremias and meningitis due to gram-negative bacilli. Some bacilli in a given colony may be resistant without the whole colony. Several times as much concentration must be maintained as is necessary in vitro. The results in typhoid and brucellosis are inconclusive.

Untoward reactions are not infrequent and increase in frequency with increasing dosage.

These are a few items of an absorbing talk of an hour and forty minutes, followed by discussion and adjournment.

Respectfully submitted,
A. H. MORRELL, M. D.,
Secretary.

The regular meeting of the Kennebec County Medical Association was held March 18, 1948, at the Elmwood Hotel, Waterville, Maine, with 41 present.

At 5.30 P. M. a clinical session was held, presided over by President, Dr. William L. Gousse. Cases were presented by Drs. Dore and Guite, and Dr. Rancourt, D. D. S.

Dinner at 6.30 was followed by a business meeting called to order by the President. The minutes of the previous meeting were read and approved.

Dr. Dunham Kirkham of Togus, and Dr. Charles B. Popplestone of Fairfield, were elected to membership.

The resignation of Dr. G. H. Lambert, formerly of Winthrop, was accepted.

The remainder of the evening was given over to Dr. B. Tenney of Boston who discussed "Obstetrical Problems." He covered thoroughly the management of the 3rd stage of labor, the management of bleeding in the last trimester of pregnancy, and the evaluation of the pregnant woman as to type of delivery, including a discussion of X-ray pelvimetry test of labor.

His comments were extremely practical, and brought out a good discussion.

Respectfully submitted,
THEODORE E. HARDY, M. D.,
Secretary pro-tem.

New Members

Cumberland

Laszlo Ormandy, M. D., Portland, Maine.

Horace K. Sowles, M. D., Portland, Maine (by transfer from the Massachusetts Medical Society).

Kennebec

Dunham Kirkham, M. D., Togus, Maine.

Anthony Lepore, M. D., Gardiner, Maine.

Charles B. Popplestone, M. D., Fairfield, Maine (by transfer from the Knox County Medical Society).

Waldo

Abraham O. Stein, M. D., Stockton Springs, Maine.

News and Notes

Tumor Clinics

Bangor: *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*

Lewiston: *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*

St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*

Portland: *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Joseph E. Porter, M. D.*

Waterville: *Sisters Hospital*
1st and 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*

Thayer Hospital

2nd and 4th Thursdays, 10.00 A. M.
Director, *A. H. McQuillan, M. D.*

Venereal Disease Clinics

For the information of physicians wishing to refer cases of venereal disease for treatment, the State Bureau of Health announces that such facilities are available in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Bingham, Calais, Danforth, Eastport, Ellsworth, Grand Isle, Guilford, Houlton, Island Falls, Lewiston, Rockland, Rumford, Sanford, Waterville, Wilton, Millinocket, Old Town, Portland, Presque Isle, Winthrop.

Any physician wishing to refer a case may obtain the name of the clinic physician, in the town where the patient is to receive treatment, on request to the Director, State Bureau of Health, Augusta, Maine.

**Bureau of Health
Services for Crippled Children
Clinic Schedule, 1948**

ORTHOPEDIC CLINICS

Portland — Maine General Hospital, 11.00 a. m.: Jan. 12, Feb. 9, Mar. 8, Apr. 12, May 10, June 14, July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.

Lewiston — Central Maine General Hospital, 9.00-11.00 a. m.: Jan. 23, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Rumford — Community Hospital, 1.30-3.00 p. m.: Feb. 18, Apr. 21, June 16, Aug. 18, Oct. 20, Dec. 15.

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 26, Apr. 22, June 24, Aug. 26, Oct. 28, Dec. 23.

Rockland — Knox County Hospital, 1.30-3.00 p. m.: Feb. 19, May 20, Aug. 19, Nov. 10 (Wednesday).

Machias — Normal School, 1.30-3.00 p. m.: Feb. 11, Apr. 14, June 9, Aug. 11, Oct. 13, Dec. 8.

Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Jan. 20, Mar. 3, May 4, July 7, Sept. 14, Nov. 3.

Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: Mar. 2, July 6, Nov. 2

Fort Kent — Normal School, 9.00-11.00 a. m.—1.00-3.00 p. m.: Jan. 21, May 5, Sept. 15.

Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: Jan. 29, Mar. 25, May 27, July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 25, June 23, Oct. 27.

By appointment only.

PEDIATRIC CLINIC SCHEDULE — 1948

Bangor — Eastern Maine General Hospital, 1.30 p. m.: Jan. 30, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Waterville — Thayer Hospital, 1.30 p. m.: Jan. 6, Feb. 3, Mar. 2, Apr. 6, May 4, June 1, July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.

Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: Jan. 28, Mar. 24, May 26, July 21, Sept. 22, Nov. 17.

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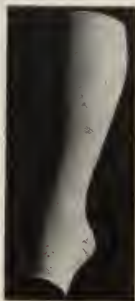
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Intestinal Obstruction—Continued from page 101

tion, and in its presence the use of the tube is contraindicated. In general the use of the tube in obstruction of the large bowel is a waste of time unless a lesion is established as being low in the ascending colon, and even here its use is open to question because of the danger of rupture of the cecum if distention progresses too far. Operability is largely a matter for the individual surgeon to decide, though with the advent of recent advances in operative technique its range and incidence go up. Lastly, but by no means of least importance, diagnosis as always is of paramount importance in determining what road to follow in definitive treatment, and in a large majority of cases it can be established with accuracy pre-operatively. Upon its early establishment depends in large measure the mortality rate in any series.

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HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.



The Journal of the Maine Medical Association

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No. 5

VENOUS HUM

From the Department of Pediatrics and Cardiology
Maine General Hospital, Portland, Maine

CHANDLER STETSON, M. D., and RALF MARTIN, M. D.

The term "venous hum" has been applied by several authors to a continuous murmur originating in the great vessels of the neck. Venous hum is sometimes transmitted into the chest, where it may be mistaken for a murmur of cardiac origin. Because of the recent surge of interest in congenital cardiovascular disease, we feel that a knowledge of the significance and frequency of this phenomenon in children is of importance.

The classic description of venous hum was given by Potain¹ in 1867, who described three types of murmurs originating in the neck: continuous murmurs arising in veins, intermittent venous murmurs, and arterial murmurs. He also described a palpable thrill over the vessels of the neck. He concluded that the intensity of the murmur depended on the phase of respiration, the degree of anemia, and the position of the head and neck with respect to the thorax. Hirschfelder² described a sound heard over the jugular vein, especially over the jugular bulb just above the clavicle, and stated that, "... the murmur is humming or roaring in character, and occurs during both systole and diastole." He also emphasized the relation of the murmur to "anemia, chlorosis, etc."

Vaquez and Laidlaw³ described "... an extra-cardiac diastolic murmur at the base. This is not unusual though its frequency has perhaps been exaggerated. Its features are its location in the second right space, not being transmitted behind the sternum, being superficial and varying with change of position of the patient. An essential feature is that it is not accompanied by any change in the size of the heart or in the peripheral circulation." Sir Thomas Lewis⁴ mentions a continuous murmur varying in intensity with respiration, heard over the jugular veins in severe anemia. He observed that, "... although this noise is sometimes audible a little way down into the chest, it is unlikely to be confused with a ductus murmur."

CLINICAL MATERIAL

The children studied were selected at random from the patients admitted to the children's ward of an average-sized general hospital during a period of approximately three winter months. These children were admitted for a variety of complaints, orthopedic and surgical as well as pediatric. Included in the group were seven with known or suspected rheu-

matic heart disease and two with congenital heart disease. Also included were forty normal newborn infants, equally divided as to sex. The patients were examined in the sitting position, and the effect of position of the head was noted. Digital compression of the jugular vein was performed in each case, and its effect on the murmur was noted. The patient was then placed in the recumbent position and re-examined.

RESULTS

Examination of the table will show that of the 220 infants and children examined, 54 had continuous murmurs audible over the inner end of one or both clavicles which could be suppressed by jugular compression and disappeared on lying down. Of the 59 children between the ages of 3 and 8 years, 32 or 54% had such murmurs. The phenomenon seemed somewhat more common in boys of this age than girls, but our number of cases is too small to allow any definite conclusions in this regard.

All of the 54 patients had clearly audible continuous murmurs, usually with a systolic accentuation, heard just below the inner end of the right clavicle, in the second right interspace at the sternal border. In 8 of these patients, a similar murmur was heard below the left clavicle. The murmurs were rushing or roaring in nature, and lacked the rather harsh "machinery-like" quality of the typical murmur of a patent ductus arteriosus. In every case the murmur could be obliterated or nearly obliterated by jugular compression on the corresponding side. In every case the murmur disappeared when the patient assumed a recumbent position. In every case the quality or intensity of the murmur could be modified by turning the head to one side or the other, or by sharply flexing the neck. The murmur could also be heard, usually better, in the neck, lateral to the sternocleidomastoid.

In view of the reports of earlier authors to the effect that anemia was an important coexistent, if not etiological, factor, we performed Hgb determinations on many of our patients. We were unable to show any significant relationship between the Hgb level and the intensity of the venous hum. Only three of our patients had Hgb levels below 8 grams %, and many children had loud hums with a Hgb of 12 grams % or more.

No attempt was made to perform further studies on patients showing venous hum. None of these patients had electrocardiograms. A few had chest films or heart films for other reasons, and no abnormalities in the heart shadow or in the vascular shadows were noted except in those cases which had known rheumatic or congenital heart disease. None of the patients whose only cardiac finding was venous hum had any cardiovascular symptoms.

INCIDENCE OF VENOUS HUM IN 220 INFANTS AND CHILDREN

Age	Boys		Girls	
	Not heard	Heard	Not heard	Heard
0-1	30	1	25	0
1-2	12	2	18	0
2-3	7	2	6	0
3-4	6	4	3	0
4-5	2	7	2	3
5-6	4	6	2	3
6-7	6	3	2	6
7-8	3	1	1	3
8-9	2	3	5	3
9-10	8	2	4	2
10-14	10	2	8	2
Total	90	32 (26%)	76	22 (22%)

DISCUSSION

The results of our preliminary studies have shown venous hum to be present in a rather high percentage of children, the highest incidence occurring between the ages of 4 and 10 years, and that boys show this phenomenon somewhat more frequently than girls.

The etiology of venous hum is still not definitely understood. Many observers feel that the murmur is truly venous in origin, arising in the internal jugular vein as a result of changes in the blood flow in this vessel due to local compression by neighboring structures in the neck. Others feel that the murmur is produced by the rapid flow of blood through the jugular bulb, or into the dilated innominate vein. Our findings have led us to agree with White⁵ in his opinion that venous hum is probably of no importance. Our impression is that about half of all children develop this sign during early childhood, and that it tends to disappear at or near puberty. The significance of this is not clear at the present time.

However, in spite of the fact that venous hum is probably of no intrinsic importance, it may be mistaken for the murmur of a patent ductus arteriosus. This happened in two cases in our Children's Cardiac Clinic prior to the initiation of the present study. Gross⁶ states that he has seen healthy children whose parents had been told that the children had serious cardiovascular defects. It therefore seems of some importance that physicians interested in congenital heart disease be familiar with this phenomenon.

In our experience, the murmur of "venous hum" is heard only with the patient in the erect position (either sitting or standing). Characteristically, it is a continuous, roaring murmur not unlike the murmur of a patent ductus, but is usually heard to the right of the manubrium sterni. Such a murmur, if abolished or markedly modified by jugular compression, and if abolished when the patient lies down, may be called a "venous hum."

Continued on page 126

A CASE REPORT OF ENCEPHALO-MYELITIS FOLLOWING INFLUENZAL IMMUNIZATION

ANTHONY J. PESIRI, LT. (JG) MC, USNR, Portland, Maine, and FRANK S. BROGGI, M. D., Portland, Maine

I. History as obtained from patient's wife:

This 42-year-old white male was apparently well until this past week when he had occasional episodes of forgetfulness and behaved somewhat sluggishly. He misplaced things, had spells of dizziness, and would be slower than normal in his responses.

Five days prior to the onset of symptoms patient was given influenza vaccine at an Army dispensary. On the morning of admission to the hospital patient awoke complaining of dizziness. He was slow in his actions, spent an unusually long time in the bathroom, and his wife had to call him several times to have him come to breakfast. As he was entering the kitchen she noticed that his left eye was turned slightly outward and his left lip was curved downward. He stumbled against a chair which was directly in his path. She also noticed that his speech was indistinct and difficult to understand. A doctor was summoned who advised admission.

Past history is essentially negative. No history of heart disease; no serious illnesses. However, patient was examined in the Army several times because "his heart misses a beat." There is no cardiorespiratory symptomatology, no gastrointestinal symptoms, no history of diabetes or renal disease.

II. Physical findings were as follows:

Patient is a 42-year-old white married male, quite obese, who is drowsy and difficult to arouse, well oriented as to time, place and person, but unaware of this morning's occurrences. He drops off to sleep with sonorous respirations shortly after being aroused. There is no noticeable evidence of paralysis. He is able to move both arms and legs upon request. However, his speech is thick and somewhat incoherent.

Blood pressure is 120/70. Pulse, 48. Temperature, 98.6. Head is normal in size and shape. There are no scars or tenderness. Eyes: Pupils round, equal, react to light, distance, and accommodation. There is a slight ptosis of the left eyelid. Mouth: Lips are dry; tongue well hydrated, pointed, and in the midline. Teeth are fair. The pharynx is clear. Neck: There is no rigidity or spasm; no venous engorgement. The thyroid is non-palpable. Chest: Expansion free and equal; no dullness; occasional basilar rales. Breath sounds are vesicular. Vocal fremitus is normal. Heart: Rate 48; slightly irregular; synchronous with the pulse; drop beat occasionally. Heart is not enlarged. There are no murmurs. Abdomen is soft, non-tender; there are no masses.

no liver, spleen, or kidney enlargement. No rash; not distended. Extremities: Normal. Reflexes: Knee jerks are present but hypoactive. Abdominals are sluggish but present. There is no Babinski; no Brudzinski; no Hoffman's sign; no facial palsy. Tongue protrudes in the midline. Vision is said to be normal. Funduscopy: The discs appear to be normal. The fundus appears to be normal.

III. Laboratory findings were as follows:

Blood sugar: 90 mgm. NPN, 35 mgm. Blood count: WBC 6,200; 37% small mononuclears; 5% large mononuclears; 2% eosinophiles; 52% neutrophils; 4% stabs. Hemoglobin 100%, 14.5 gms. Spinal fluid Colloidal Gold negative. Cell count: 2 white blood cells; no red blood cells. Sugar reduction present. Chloride 690 mgm. per 100 c.c.'s; globulin not increased. Urine: Specific gravity, 1.009; color, yellow, reaction, acid; albumin and sugar are not present. Pus: 0-2 per high power field; amorphous urates present. At no time did the spinal fluid exceed 170 mm. pressure.

IV. Progress notes:

First hospital day: This afternoon patient gradually became drowsy, had sonorous breathing and was unable to be aroused. A spinal tap was done and 10 c.c.'s of clear colorless fluid were obtained under normal pressure. Deep reflexes are still hypoactive. No positive Babinski elicited.

Third hospital day: Patient seemed more alert this morning; however, left pupil appears to be slightly dilated and reacts sluggishly to light. Speech is still indistinct. Bladder is distended to the umbilicus. Patient attempted to void unsuccessfully. He was catheterized and 34 ounces of clear urine were obtained. Patient drops off to sleep if not continually questioned.

Fourth hospital day: Patient's condition unchanged until late this morning when drinking milk through a glass straw he suddenly developed tightening of his jaw muscles. He did not swallow contents in mouth; did not respond to name, and stared blankly up at ceiling. No pathological neurological signs were present. Milk had to be suctioned out of his mouth.

Fifth hospital day: Patient appeared to be more alert this morning. Asking for fluids frequently. He had six occurrences of yesterday's episode, with sudden spasm of the jaw and blank expression, and was

irresponsive to stimuli. These episodes last about a half an hour when patient again begins to respond. His left knee jerk is entirely absent today, and no plantar reflexes are obtained. Abdominals also are absent. No positive Babinski elicited.

Sixth hospital day: Patient quite coöperative. Repeat spinal tap revealed no elevation of pressure. Temperature has remained normal throughout hospital course. Patient is somnolent for long periods of time. Knee jerks are absent bilaterally, ankle jerks are absent bilaterally, abdominal reflexes are absent bilaterally. Cremasterics are present. Patient has positive Babinski on the right and a slight fanning on the left this morning.

Seventh hospital day: In addition to the findings of the previous day patient has become incontinent. Neurological findings otherwise changed.

Tenth hospital day: Patient shows some signs of aphasia today and it is difficult for him to form words. He is still drowsy and somnolent but moves about more frequently. He sat up in bed for a short period.

Fifteenth hospital day: Patient is more alert and eating well. He is quite restless; not so drowsy as previously. Right Babinski is still present; however, the left Babinski is less marked. Slight left knee jerk is present. There is no right knee jerk. Abdominals are still absent. The cremasterics are still present. Patient appears to be considerably improved since the date of admission to the hospital. The reflexes appear to be returning. He still reveals no evidences of any paralysis.

Twentieth hospital day: Patient appears to be normal today. Reflexes have practically all returned. Patient has been transferred to another hospital for further care since he is a member of the armed forces.

V. Treatment during patient's hospital stay:

Patient was given fluids freely and 1,000 c.c.'s of 5% glucose in saline daily; perenamine every other day; soluble B, ascorbic acid 500 units of thiamine daily. In addition to this he was given 20 c.c.'s of whole blood intramuscularly daily for two weeks from Army donors who had been recently immunized with influenza vaccine.

VI. Discussion of case — Dr. Frank S. Broggi, Neuropsychiatric Consultant:

Patient is a 42-year-old married Army sergeant who shows a definite disturbance of consciousness. He stares fixedly straight ahead and there is suggestion of loss of conjugate deviation of eyes to right or left, although patient does not respond well to questions and commands. A complete neurological

examination was impossible due to the patient's inability to coöperate. He seemed able to understand some commands, such as, "Stick out your tongue," which he did slowly and completely. He has difficulty in swallowing and is incontinent of urine. He is somnolent the majority of the time. Deep tendon reflexes, that is, knee jerks, ankle jerks, were not elicited. There is a bilateral Babinski, more marked on the left, where there is hyperextension of the large toe and fanning of the other toes. A lumbar puncture showed 170 mm. pressure and 10 c.c.'s of clear colorless fluid. Dynamics were normal. There is a history of this man having received influenza vaccine one week prior to the onset of his symptoms. Impression: I see no evidence of an expanding intracranial lesion at this examination. Due to the multiplicity of his symptoms, that is somnolence, loss of conjugate deviation of eyes, bladder incontinence, and bilateral Babinski, there must be diffuse multiple foci to cause such a syndrome. The above symptoms would suggest an encephalo-myelitis. With the history of having recently been immunized with a virus preparation, it would seem likely that this could be considered a post-vaccinal influenzal encephalo-myelitis. At least it is very suggestive of the picture seen following immunization with smallpox vaccine. Recommend (1) routine care; (2) fluids to 3,000 c.c.'s a day; (3) rectal temperatures; (4) repeated complete spinal fluid examinations. Repeated white blood cell count and differential; (5) serum from patients who have been recently immunized with influenza vaccine, 10 c.c.'s intramuscularly every day for two weeks.

Discussion of case—Dr. George M. Maltby, Neurosurgical Consultant:

Summary of impression: This is a very confusing picture; however, I believe that he has organic neurological disease, probably of a diffuse nature. This is certainly not a definite picture of an expanding lesion. I would be strongly suspicious of a diffuse encephalopathy or encephalitis, probably relationship to injection must be considered. Inasmuch as he is definitely improving, no further suggestion as to treatment at present. However, I think that he should have spinal fluid studies with careful pressure and complete chemical studies. I think, also, it would be wise, if it is felt safe, to have him taken where electro-encephalographic laboratory is available and have an electro-encephalogram performed. One must still keep in the back of his mind neoplasm, such as a diffuse gliomatosis of the meninges.

VII. Comment:

At the present time, nine months following admission, the patient is entirely symptom free and has

Continued on page 130

DEBUNKING PUBLIC RELATIONS* **

ROLLEN W. WATERTON,† Oakland, California

Faced with adverse legislation resulting from public misunderstanding and disapproval, doctors long ago called their colleagues together to consider the problem.

Soon we began to hear medical orators shouting, "The public must be informed. We need public education, a public relations program. Let's follow the lead of business and industry and hire top-notch publicity men. Let's mold public opinion. We'll buy ads in all of the newspapers and magazines. We'll blanket the nation with tons and tons of literature, telling our story. We'll buy time on the radio. We'll debate, give speeches. We'll lobby the legislature. We'll levy special assessments, raise lots of money. We'll change the public mind to *our* way of thinking."

Publicity men were hired. The money was raised, and millions have been spent. The propaganda was distributed. The speeches have been given. The ads have appeared in the national magazines and in the daily press. The radio time has been used. The debates have been heard. Public relations committees have been discharged, and others appointed. Experts have been fired and new ones hired, each with a different brand of public opinion-molding magic, each with a louder voice, or a faster typewriter, or a bigger and better crystal ball.

But that which is known as the "public mind" has not been changed. Bills establishing systems of state medicine are still perennial in the state and national legislatures. "Public opinion" polls still reflect the public desire for a change.

It is evident that these liberal doses of so-called public relations have not improved medicine's relations with the public.

It is therefore time to re-examine our concepts of "Public Relations." We must determine first of all the meaning of the term.

"Public" is a collective noun. It means "The people collectively."

Medicine's method for improving public relations has been to approach people collectively, to "mold public opinion," to "change the public mind."

But the people who comprise the public are indi-

viduals. They have individual minds, just as they have individual livers. You have never confronted a "public liver;" I find it equally difficult to envision a "public mind."

However, some quirk in our mass production thinking has made possible the concept of a "public liver," and even a "public liver" expert. Witness the mass liver therapy of Carter and his "little liver pills." The same quirk may be responsible for the concept of a "public mind," and a "public mind" expert. Witness the mass mind therapy of the self-styled public relations "experts" with their little propaganda pills. Every mind gets the same dose; every pill has the same ingredients.

Experience has taught medicine that one man's liver and its functions must be considered and treated differently from another's. Experience should be teaching medicine that one man's mind and its functions must be treated differently from another's. Physicians, above all people, should know the pitfalls of generalization, of mass therapy, of a collective, singular concept in the treatment and reactions of the organs of people, of which the mind is one.

Our first step in debunking what has passed for medical public relations must be a recognition of the dangerous fallacy of this "collective" view of the problem.

The Public doesn't cast a vote at the polls; Pete Brown and Mary Johnson vote their personal convictions. The Profession doesn't treat *The Public*; Doc Jones took care of Jim Hansen's little boy. *The Public* doesn't have economic relations with *The Profession*; Joe Blow got a whopping bill from Dr. Smith. *The Profession* doesn't have bad public relations; Mollie Glutch, Bill Jones, and millions of others are just dissatisfied with what thousands of separate and very singular doctors did to them, economically, scientifically, or both.

The "Public Relations" of the profession is merely the computation of the incidence of good and bad relations between individual doctors and individual people.

Public health, good or bad, is the health of individual people, added up. Public relations, good or bad, is the relations of individual people, added up.

You treat bad public relations like you treat public syphilis; one case at a time. If the nation's maternal mortality rate is too high, the work of a "public obstetrics" expert won't lower it except as he is able to educate and improve the work of the people who practice obstetrics.

* Delivered before a meeting of the Association of American Physicians and Surgeons at Colorado Springs, Colorado.

** Reprinted from *The Bulletin of the Alameda County Medical Association*.

† Executive Secretary of the Alameda County (California) Medical Association; former Executive Secretary of the Lake County (Indiana) Medical Society.

Doctors decry impersonalized mass treatment in their field, yet they are everywhere busily applying impersonalized mass treatment in the public relations field. It won't work in medicine; it won't work in public relations.

Again—and *always*, let us remember that the public must be considered and treated as individuals.

Our next debunking excursion is into the realm of the "relations" part of "public relations."

In the first place, it just isn't feasible for us to hire someone to have our relations with others for us. It is a job we have to do ourselves. It's like making love: satisfactory results are obtained only when you do it yourself, even if you aren't an expert.

How, for example, are doctor-patient relations improved by the employed "relations expert" whose propaganda message is read by any one of the millions of people who have been the economic victims of doctors who leave the complexities of the financial aspect of medicine to untrained secretaries and greedy bill collectors?

Of what value is the expert's soft, compelling radio voice when it oozes into homes of people who have been impoverished by excessive medical fees?

What kind of result can your "relations expert" get when his words reach any one of the many millions of Americans who have been soured on medicine through their contacts with any one of the scores of patient-relations mistakes that are made each day in nearly every doctor's office?

Judged by sordid statistics supplied by a study of the nation's commercial collection agencies, the known proportion of disgruntled patients to satisfied ones is itself alarming. From one-fourth to one-third of the families in most cities in the nation have been hounded at one time or another by collectors for doctor bills.

There is no way of estimating the additional unknown number who escape this category by settling their medical accounts without coercion but with an active antagonism against medicine. Together these groups form a bloc that is a formidable obstacle to good public relations. The bloc was created by individual doctors: it can be removed only by individual doctors.

It is a fact that in most communities bill collectors handle a greater dollar-volume of accounts for physicians alone than for all other credit grantors combined. Delinquent medical accounts form the only factor in the economic life of the community which can be and often is the sole support of a commercial collection agency.

If this much economic difficulty with its customers became true of any commercial enterprise, it would mean failure for the enterprise. If this continues to

be true of medicine, it will mean the usurpation of the economics of medicine by those who proffer the public the promise of better business management—by the government, the insurance companies, the hospitals.

Doctors of medicine have a billion dollar annual business relationship with their patients each year. But the only source of even partial information and education on the conduct of that business comes from a little throw-away (but excellent) trade journal — *Medical Economics*. There has been no "consumer research" into the business side of medicine. There has been no study of the reasons these millions of patients have business disagreements with their physicians, no delineation of the ways to prevent them.

How can we expect good relations in a business we know nothing about?

Here, truly, is the job which must be done — to learn prevention and cure of bad doctor-patient business relations, and to teach doctors what has been learned.

The actual improvement of these relations can be achieved only by the individual practitioners of medicine. This can't be done by an employed "expert," working apart from the doctor on the non-existent "public mind." Friends of medicine just can't be made as fast as doctors are losing them through their ignorance of simple business practices and ethics.

So let's debunk the attractive idea that there is a short-cut to good public relations. You can't take an easy road by hiring a "relations expert" to have your relations with people for you. It just can't be done.

And, while we are in a debunking mood, let's debunk this one. You've heard this said: "Patients like their own doctors: it is the organized profession that is in public disfavor." Patients do like the doctors to whom they return again and again. But ask the next fifty people you see how many *other* doctors they dislike. Most of them will damn the entire medical profession—excepting their family doctor—because of actual unsatisfactory experiences with other *individual* doctors. Try as he may, individual practicing physicians cannot get out from under the full burden of responsibility for medicine's public relations.

Another popular fallacy that needs a thorough debunking is that "publicity" and "public relations" are synonymous.

Anyone who confuses these terms knows nothing of the spirit and substance of public relations. Just as the physician immediately recognizes the work of a quack, the competent relations counsel immediately recognizes a novice or faker in his field. These quacks in public relations who call themselves ex-

perts hold out the promise that they can insure you against poor public relations and state medicine with their particular brand of publicity.

Like a massage or steam bath, publicity may make you feel better. It is pleasant to see your name in print and to read the nice things you have paid someone to say about you. But the publicity masseur too often keeps his ailing client from competent hands until it is too late. His work, like that of the physiotherapy cults, may be prescribed as a necessary *part* of a public relations program, but when publicity is offered as the cure-all of public *relations*, it becomes a dangerous cult. And this is the cult from which organized medicine has accepted its counsel and advice.

Medicine has had its publicity massage; but it still has ailing public relations.

It is an obvious fact that the publicity man believes there is only one party to a relation.

In public relations, however, we leave to the psychiatrists those people who have relations with themselves.

In public relations, we interest ourselves in normal relations — to which there are two parties, at least. When there is a break in such a relationship, we examine both parties; in this case, the public *and* medicine, the patient *and* his doctor.

Publicity men lay all the blame on the public; their clients are never wrong, never subject to change. They work only to change the public mind. The public relations man is less popular with his client because his diagnostic methods are more scientific and include an examination of *both* his client and the public.

Any qualified (but courageous!) public relations counsel who might be called upon to assist the medical profession in the diagnosis and treatment of its present public relations dilemma will proceed as follows:

(1) He will analyze the medical profession to determine if and wherein it fails to deliver the best possible service, fairly priced, conveniently available, pleasantly and honestly given. Because medical care is a necessity of life, he will determine whether it is universally available at the place and time it is needed; whether, in availing himself of its benefits, undue financial burden is placed upon the patient. He will examine every contact of every physician with every patient, every contact of medical organizations with the public. In short, he will take a history and examine his patient.

(2) He will analyze the public to learn its expectations of, and reactions to, the medical profession.

(3) He will establish a diagnosis, on the basis of the foregoing dual history and examination.

(4) He will institute the treatment indicated.

(a) Therapy for the medical profession will not be of the passive, painless variety, but a dramatic recovery can reasonably be predicted *if* the orders are followed. But the physician must learn that, in this case, he is the patient, and he must follow orders, not blindly, but with understanding. Every attempt must be made by the public relations counsel to bring the profession to an understanding of the underlying reasons for and results to be expected from each phase of the treatment; if the patient is not coöperative, however, and cannot understand that treatment for public relations ills, like medicine, is not always palatable, the public relations counsel has failed. He will then lose a patient to the publicity man, and medicine will probably lose its freedom.

(b) Therapy for the public, to be instituted when the medical profession has responded favorably to treatment. Here the public relations counsel brings in the publicity masseur to change the public mind, to assist him in revealing a *changed* and more acceptable medical profession to the smiling public, and frankly and honestly to explain away public misunderstandings of the profession (changing the public!) which were discovered in the original history and examination of the public. This is the (comparatively) small, but important part publicity plays in a public relations program; publicity is *not* public relations. Alone, in medicine's present problem, publicity is a cult; used with discrimination in its proper relation to a public relations program, it is efficacious and essential to the achievement of good public relations.

This kind of public relations diagnosis and treatment was described to and accepted by the members of the Alameda County Medical Association when I became their executive secretary two years ago. It was copied from my report to them; it is interesting to note that Raymond Rich Associates, who never saw that report, have duplicated this method in their recent recommendations to the Colorado Medical Association.

In our own program we have faltered and we have made mistakes, but we have also made significant progress. Our study in Alameda, San Francisco, and Santa Clara counties, of thousands of cases of unsatisfactory physician-patient relations will be completed early next year. From this we will be able to tell the profession the frequency of occurrence of more than two hundred reasons for patient dissatisfaction. We will soon be able to tell the story of how these ailing doctor-patient relationships, which add up to *bad* public relations, can be prevented and how they *have* been prevented in the offices of physicians in many types of practice. Financed in part by the

California Medical Association, these studies will, we hope, form the background for further "consumer research" in the thus far little-understood billion-dollar business aspect of medicine.

We are learning how to give the public protection from excessive fees. We have advertised and are delivering medical care to everyone in our area, regardless of inability to pay. We are promoting our voluntary health insurance plans. We have in operation a plan to protect the public from incompetence and unnecessary care in our approved hospitals. We have removed the bill collector from the physician-patient economic relationship. We are doing many other things to provide the background for good public relations, but we have not yet been able to convert all of our own members. When we have, we'll be well on the way to providing a pattern for good medical public relations.

Our greatest need has been reliable, outside confirmation of the validity of our ideas of sound public relations. Our individual members, upon whom this concept of public relations places the heaviest burden and the largest responsibility, have observed that we seemed to be alone in the nation in our ideas as outlined in this paper. And indeed we were, until the recent appearance of the Raymond Rich Associates report to the Colorado Medical Association. We are sending a copy of that report to each of the 900 members of our county society. I urge you to read it, to sense the soundness of the public relations philosophy that lies behind it. You will not agree with every detail, nor do I, but you will find in it what I believe is a substantial foundation for good relations with the public.

And now, to summarize this paper:

1. There is no "public mind." *People* have

opinions; the *public* doesn't. Mass treatment is not only ineffectual; it is dangerous.

2. Employed experts can't have relations with people *for* you. Nothing on earth can make people like you while you are doing things they dislike. The profession can get help to learn what to do to build satisfactory relations, but doctors themselves will have to do the building.

3. Organized medicine didn't acquire bad public relations just because it was organized medicine. It has public disfavor because it represents all of the doctors with whom individuals have had bad relations—and there are more of them than you think.

4. Public Relations and Publicity are no more synonymous than are scientific medicine and physiotherapy. You can no more cure every public relations ill with publicity than you can cure every human ailment with physiotherapy.

5. There are two parties to a strained and unsatisfactory relationship. Medicine needs to put its own house in order before it can make permanent changes in the public thinking.

In conclusion: Common sense points the way to good public relations for medicine. The primary requirement is that the individuals who comprise medicine—all physicians—earn good relations with the individuals who comprise the public—all patients. There is no short-cut, no easier way.

Medicine will have made its first step toward the acquisition of good public relations only when doctors learn from progressive thinkers within their ranks that the best guide to desirable medical public relations will be found in their own code of ethics. Thoroughly and completely debunked, public relations is, in every sense, nothing more nor less than fundamental human relations.

Venous Hum—Continued from page 120

CONCLUSIONS

1) The phenomenon of venous hum has been described, and its significance discussed.

2) The incidence of venous hum in a group of 220 infants and children has been reported, showing the relatively frequent occurrence of this finding in children.

The tuberculous patient who has not learned the practical facts of life concerning tuberculosis, who has not found a job and a way of living which are compatible with his individual case, can hardly look

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- 5) White: "Heart Disease" (Macmillan, 1944), 3rd Ed., page 87.
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CLINICO-PATHOLOGICAL EXERCISE

Gynecological case presented at the Eastern Maine General Hospital

DR. GEORGE ROBERTSON Presiding

Edited by JOSEPH E. PORTER, M. D.

This patient is a 57-year-old housewife, who enters the hospital with the chief complaints of nausea, vomiting, and abdominal distention of three weeks' duration. She states that 20 years ago she had an operation for a "cancer of the uterus" at a Boston Hospital. Patient cannot recall details of the operation, but states that the uterus and adnexae were not removed. At the time of the operation, a colostomy was done. Subsequent to this, she was treated with X-ray and radium at this hospital. She states that since the operation she has been well and active in her house work and other activities. The colostomy always functioned well, and her only complaint has been urinary incontinence and passage of urine from the rectum. These have been present since the time of her operation.

About 4 months ago, the patient began to complain of slight weakness and some decrease in her ordinarily good appetite, but was without specific complaints. Three weeks ago, she noted the onset of nausea, persistent vomiting, and anorexia. At this time she began to pass liquid movements through the colostomy, and noticed abdominal distension. She also began to complain of para-umbilical pain which radiated to the upper abdomen and lower anterior chest. She noticed also the onset of occasional jerking involuntary movements of her extremities, and a coarse tremor. Vomiting has been persistent up to the time of admission, and she has been in bed on a liquid diet. She has been on four daily $\frac{1}{4}$ grain doses of morphia for the past 20 years, and received $\frac{3}{4}$ grain about 3 hours prior to admission.

Physical examination reveals an obese, well developed, middle-aged woman, who seems moderately confused but is rational and coherent. Temperature 98.6; Pulse 120; Resp. 24; BP 160/84. The pupils are slightly dilated, and show no further abnormality. The sclerae are clear. The throat and the chest are negative. The heart is negative, without murmurs or demonstrable enlargement. The abdomen is moderately distended and tympanitic. Peristaltic sounds are present. No free fluid is demonstrable. There is a healthy-appearing double barrel colostomy in the LLQ. There is diffuse tenderness over the lower abdomen. There is a greyish, cheesy discharge from the introitus, and urinary dribble. One finger is admitted vaginally, and the vaginal wall is found to be indurated and irregular. The cervix is not palpable.

Examination is unsatisfactory, and a speculum cannot be introduced. The tendon reflexes are hyperactive.

Laboratory Findings:

Blood: Hb. 10gm. 64%. R. B. C. 4.3 million. W. B. C. 16,900, 85% mature neutrophils.

N. P. N.: 190mgs. %. No urine obtained for examination.

The patient declined rapidly from the time of admission. She was placed on intravenous glucose and saline, a Miller Abbot tube passed, enemata given via colostomy. Nurses notes testify that she was nervous, apprehensive at all times. She did not sleep, complained of rather severe pain requiring repeated doses of morphia. At all times she was incontinent of urine. Numerous "muscle spasms" were noted, and 2 hours before death, she had a generalized seizure, with uncontrollable thrashings, cyanosis, clammy skin. 8cc. of paraldehyde was given intramuscularly with little sedative effect. At this time she bit her tongue and bled from the mouth. Thereafter, she was incoherent, exhibited unceasing muscular activity and "epileptic" seizures, with marked cyanosis and dyspnoea. She expired 24 hours after admission.

DISCUSSION

Dr. Donald F. MacDonald: The early part of this patient's history is rather puzzling. We know nothing of the symptoms which led up to her first hospital admission. At the age of 37 she was said to have had an operation for "cancer of the uterus" at which time a colostomy was performed. This was followed by X-ray and radium treatments. For approximately 19½ years she appeared to get along quite well with a satisfactory colostomy. Her chief complaint was urinary incontinence and passage of urine from the rectum. The fact that she had taken a $\frac{1}{4}$ gr. dose of morphia daily for 20 years suggests that she either had pain during this time or was a morphine addict. After 19½ years of moderate well being she developed symptoms of nausea, vomiting, distention and involuntary twitchings. This history suggests a blocking of the ureters with the development of hydro-ureters, hydro-nephrosis and uremia. This is substantiated by the N. P. N. of 190mgm.

per 100cc. There is a possibility that the cerebral symptoms might have been produced by tumor metastasis to the brain but uremia sounds more like the probable diagnosis.

Although the terminal picture appears to be readily explained, the early history and 20 years of moderate quiescence is rather baffling. The thing which puzzles me most about this case is the fact that she went 20 years after the diagnosis of cancer of the uterus had been made, particularly since at the time of operation a colostomy was performed. This would seem to indicate an extensive spread of malignant disease in the pelvis at the time of operation. The fact that she had urinary incontinence and urinary dribble following the operation suggests that the ureters were transplanted because of widespread tumor. One must assume that she had involvement of the bladder by tumor, a utero-vesical fistula, or a vesico-rectal fistula. If the spread of malignant disease was that extensive she probably would not have lived 20 years.

If one doubts the diagnosis of cancer of the uterus one should postulate other conditions for which she might have had an abdominal operation with colostomy followed by X-ray therapy. X-ray might have been given to control the bleeding caused by fibroids but this does not explain the colostomy. There is one possibility which might explain the whole story, namely, extensive endometriosis, with involvement of the colon. I have never seen endometriosis cause complete intestinal obstruction but the endometriosis may have been too extensive for complete removal. It is possible that in an attempt to eradicate the endometriosis the surgeon may have nicked the bowel and been forced into a colostomy. X-ray or radium may have been given to sterilize the patient for treatment of the endometriosis. Although we have been taught to think of the cause of death in terms of single diagnosis there is a possibility that this patient's initial symptoms may have been due to endometriosis and that the terminal chain of events was associated with carcinoma of the cervix which spread to the surrounding pelvic structures causing obstruction of the ureters, hydronephrosis and uremia.

Dr. Philip Sullivan: We recently had a somewhat similar case with a much less involved history which I discussed at one of our Cabot case conferences.¹ In this case there was intestinal obstruction caused by endometriosis but the story was not complicated by a history of malignant disease. Intestinal obstruction due to endometriosis of the bowel has been reported by numerous authors, including Novak,² Goodall,³ TeLinde,⁴ and others. At operation it may easily be mistaken for carcinoma, usually of the annular type. Complete obstruction is a rarity.

Dr. Lloyd Brown: It would be difficult to explain the whole picture in this case on the basis of endometriosis. The radiation which was administered should have controlled the endometriosis.

Dr. Hugh Smith: Her story of laparotomy 20 years ago suggests that the surgeon, apparently felt the tumor was inoperable, backed out and did a colostomy. He then returned her for radium and roentgen therapy. This is inadequate treatment for the complete control of cancer and she should not have survived for 20 years.

Dr. John Houlihan: Why did she have urinary incontinence?

Dr. Herbert Clough: It must have been a result of a vesico-vaginal or vesico-rectal fistula. Either of these might become readily infected, with the development of retrograde infection leading to pyelonephritis and uremia.

Dr. Brown: If she had had pyelonephritis would you not expect her to have had an elevated blood pressure?

Dr. Clough: Her blood pressure might have been higher before she was admitted to the hospital. Her diarrhea might also be explained by the vesico-rectal fistula.

Dr. MacDonald: Her diarrhea was of relatively brief duration and can be explained on the basis of the uremia. She had been passing urine by rectum for some years.

Dr. Clough: Could her abdominal distention been due to the uremia?

Dr. MacDonald: I think that is the probable explanation.

Dr. H. Smith: It might be aerophagia and acute dilatation of the stomach.

Dr. Clough: Could the marked abdominal distention be due to sympathetic stimulation of some sort? In a recent issue of the Bulletin of U. S. Army Medical Dept. (Vol. 8, Page 99, February, 1948) there is an article discussing the suddenness with which the bowel can fill with gas. Sudden distention of the bowel has been observed during urethral catheterization, in cases of biliary colic, pyelitis and acute appendicitis. It frequently appeared to follow trauma to a kidney or ureter. The release of this gas appears

- (1) *N. E. J. Med.:* Cabot Case: Vol. 227 (August 27, 1942).
 - (2) *Obstetrical and Gynecological Survey* — Vol. 2 — February, 1947 — pp. 97-98, Williams and Wilkins, Baltimore.
 - (3) Goodall, James R.: *A study of Endometriosis, Endosalpingiosis, Endocervicosis and Peritoneo-ovarian sclerosis, A Clinical and Pathologic study*, Philadelphia, Lippincott, 1943.
 - (4) TeLinde, Richard W.: *Operative Gynecology*, Lippincott, 1946.
- Arthur, H. R.: *Endometriosis of colon*. *Proc. Royal Soc. Med.*, 39:575, 1946.

to be related to pain or fear and is considered to be due to a nervous mechanism which allows a voluminous release of gas from the blood which is traversing the capillaries of the intestinal mucosa.

Dr. Brown: It interests me that a patient who received $\frac{3}{4}$ gr. of morphine 3 hours prior to admission should have dilated pupils. This cannot be explained by morphine tolerance.

Dr. Clough: Perhaps this is further evidence of sympathetic stimulation.

Dr. Brown: Might we not expect sympathetic irritation in uremia? The hyper-excitability stage of uremia has many of the characteristics of sympathetic irritation. This might explain the dilated pupils.

Dr. Richard C. Wadsworth: It is possible that the history given by the patient was not an accurate one. She may not have known the exact procedure followed at operation. Perhaps the surgery was more extensive than the patient realized.

Dr. Smith: They might have removed the uterus but they couldn't have removed the cervix or there would have been no place in which to implant radium. It is possible that the tumor involved the bladder and that a cystectomy was performed with transplantation of the ureters. If they had originally operated on a primary bladder tumor they might have performed a cystectomy or a partial cystectomy or inserted radon seeds but we have no evidence of this. It is possible that they used roentgen therapy to sterilize her in treating endometriosis but it is unlikely that they would have also used radium in addition.

Dr. Wadsworth: The record clerk has just brought us the record of this patient's first admission 20 years ago. She was admitted to this hospital because of vaginal bleeding of 8 months' duration. For 8 months she had had intermenstrual bleeding. She had had a purulent vaginal discharge since the age of 20. Vaginal examination revealed a very hard nodular swollen cervix which bled freely on examination. The pathology appeared to be limited to the movable portion of the cervix. No mention is made at this time of a colostomy. Five days after admission 100mgm. of radium, "tandem in catheter," were inserted in the cervical canal to the posterior portion of the cervix. The canal was dilated easily with negligible hemorrhage. The lesion appeared to be situated in the anterior lip. Six radium needles were inserted anterior to the entrance of the cervical canal. The radium was removed in 24 hours. No mention is made of a laparotomy.

Dr. Smith: If one assumes that the radium needles were of 10mgm. content we can conclude that a maximum of 3800mgm. hours of radiation were

given. In 1928 this was a fairly good dose for an early lesion of the cervix.

Dr. MacDonald: It would appear that it is unnecessary to assume the existence of endometriosis to account for the early part of this patient's illness. She seems to have had an early carcinoma of the cervix. The subsequent operation was probably performed because of some complication of this carcinoma. The lesion was probably more extensive than the original examination indicated. She may have had widespread extension with involvement of the bladder and rectum. This would explain the colostomy and the possible development of a vesico-vaginal fistula. If her terminal ureteral obstruction was on the basis of residual tumor it is remarkable that she lived for 20 years.

Dr. Wadsworth: It is possible that she might have had a radium burn of the large bowel which necessitated colostomy. If we assumed this reason for the colostomy it is not necessary to assume that there was an early extensive spread of malignant disease.

Dr. MacDonald's Diagnosis:

Carcinoma of cervix with parametrial metastases.
Vesico-vaginal fistula.
Ureteral obstruction.
Hydronephrosis.
Uremia.

Dr. Wadsworth's Diagnosis:

Carcinoma of cervix with metastasis to left ureter and para aortic lymph nodes.
Bilateral ureteral stenosis.
Bilateral hydronephrosis.
Purulent pyelonephritis, left.
Surgical absence of uterus, tubes, urinary bladder.
Vaginal transplantation of ureters.
Colostomy of sigmoid colon.

At autopsy the tumor was confined to the lower end of the left ureter and to the lymph nodes along the aorta up to the level of the hilus of the left kidney. The right ovary was present but atrophic. The left ovary was not demonstrated. The uterus and tubes were missing. No urinary bladder could be demonstrated. The ureters passed through dense fibrous tissue and emptied into the upper vagina. The pelvis was filled with fat and moderately dense connective tissue. The rectum was collapsed and empty. There was no evidence of any fistula into the rectum. Both ureters were markedly dilated. The right kidney consisted of a dilated pelvis with no grossly demonstrable kidney tissue. The left kidney was enlarged to approximately twice normal size with marked distention of the pelvis and calyces.

Throughout the kidney tissue were numerous small collections of yellow pus. The brain weighed 1145 gms. There was no evidence of thrombosis, hemorrhage or tumor.

The post mortem findings suggest that the surgeon removed the uterus, tubes, left ovary and bladder and transplanted the ureters into the vagina. Thus the urinary incontinence is readily explained. The patient probably did not pass urine per rectum. Histologically the tumor obstructing the lower end of the

left ureter consists of rather undifferentiated epithelial cells suggesting a transitional cell carcinoma. Occasional mitoses are demonstrable. The tumor extends through the entire wall of the ureter. It is conceivable that this tumor could have come from the cervix. The possibility exists that this is an independent primary tumor of the ureter. It seems to me, however, that the burden of proof is on the person who says that it is not a metastasis from the original cervical tumor.

A Case Report—Continued from page 122

resumed his former clerical duties as an Army sergeant and performs them in a satisfactory manner. There is no evidence of paralysis or residual pathological neurological signs. As far as we have been able to determine, this is the first case of its kind to be reported. In communications with the Surgeon General of the United States Army and the Public Health Service, and also the Navy Bureau of Medicine and National Institute of Health, no other cases have been cited.

Encephalo-mylitis has been known to occur following the administration of smallpox vaccine. This case so closely simulates the characteristic course of that type of post-vaccinal encephalo-mylitis that the above diagnosis was considered most probable. However, in view of the fact that there is no laboratory examination which will establish definitely that diagnosis, only the clinical picture can be relied upon as a basis for diagnosis. In Bing and Haymaker, and also Wechsler, discussions of post-vaccinal encephalitis can be found which occur following smallpox and measles. It is usually a very acute and stormy disease which runs a fairly rapid course and comes on between seven to fourteen days after vaccination. The characteristic symptomatology consists of head-

ache, prostration, coma, paralysis of one or more extremities, loss of certain reflexes, and sometimes a positive Babinski sign. Often one finds meningismus and loss of conjugate deviation of the eyes. The spinal fluid may be under pressure but is otherwise normal. The mortality rate has been as high as 40%. The only suggested treatment in those cases is injections of serum from patients who have been recently vaccinated.

This case is not presented to discourage the use of influenzal immunization, and to date there have been no cases of encephalo-mylitis following influenzal vaccine in the literature. The occurrence of post-vaccinal encephalo-mylitis following smallpox vaccination is less than 1 per 100,000 cases, and it is well known that because of this rare possibility smallpox vaccination should not be discontinued. It is presented, however, as a source of medical interest and in order that similar cases may be more easily recognized should they occur following influenzal immunization. It is also presented because of the fact that whole blood from patients who have been recently immunized seemed to be very beneficial in the treatment of this type of case.

In regions where histoplasmin sensitivity is widespread, pulmonary infiltrations as well as calcifications are frequently nontuberculous, and can be differentiated from tuberculosis only by skin tests at presents. Michael L. Furcolow, M. D., Herbert L. Mantz, M. D., and Ira Lewis, M. D., *Pub. Health Report*, Dec. 5, 1947.

The steadily increasing industrial employment of women in this country has not as yet been reflected in a higher tuberculosis mortality in women, even at the ages of highest susceptibility. Henry D. Chadwick, M. D., and Alton S. Pope, M. D., *The Modern Attack on Tuberculosis*, The Commonwealth Fund, Revised, 1946.

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THE PRESIDENT'S PAGE

Our Annual Meeting at Poland Spring, June 20, 21, and 22, 1948, has been designated the General Practitioner's Session. For that reason your Committee headed by Dr. Francis A. Winchenbach of Bath has made the Scientific Sessions and entertainments of singular interest and education to the doctor who sees, handles, and begins the treatment on every type of Medical case. We are having more Commercial exhibitors than ever this year, so we are able to spend much more for your enjoyment. All of the sessions except those held in the morning will be of interest to the ladies.

Sunday evening's entertainment is different from anything that you have ever seen or heard before. Mickey MacDougal's experience as a detective in exposing crooked gamblers in the Army and in private clubs is most interesting. He is an author, prestidigitator and entertainer of international reputation. Take it from me this will be the best Sunday night's entertainment that your Annual Meeting has ever had.

Monday morning's session will be of special interest, with men speaking who have had years of successful practice in General Medicine. Various practical and economic subjects will be covered.

Monday afternoon will be taken over by the Medico-legal society. This has always been an interesting program to the Doctors and Ladies as well. In fact, their meeting stole the show at our last two Annual Meetings.

Monday evening's Dinner Session should be especially good with Arthur Conrad of the Medical Extension Foundation and Judge Edward Curran of Washington, D. C. speaking on Medical Economics.

Tuesday morning, there will be a fine Symposium upon Hypertension, as encountered in the various fields of Medicine. This subject should appeal to every Doctor in the State.

Tuesday afternoon's session will present two Nationally known teachers and speakers on their Special subjects.

Tuesday evening at the Annual Banquet, you will hear Major General Hersey, who did such a fine job as head of the Selective Service in the recent World War. He is a fine speaker and promises that his talk will not be all about War. Just to leave a good taste in your mouth, we have obtained the Rev. John Nicol Mark of Arlington, Massachusetts, to close the session. His Scotch wit and humor and the little sermon with which he winds up his speech, will stay with you for many days.

I especially urge that every Delegate and Alternate from the various County Societies plan to attend. We have a number of economic questions that must be settled. Any Doctor in the State has the privilege of attending these meetings and listen in. Unless he is a Delegate, however, he cannot take part in the session. There is so much on the docket, we may have to call a session on Tuesday.

There is a rumor around that a Ladies Auxiliary may be inaugurated soon. Our women are of extreme value and usefulness in the various activities, such as the Nurse recruiting program, child health, medical legislation, to say nothing of keeping the Old man in good health.

Take off a few days, and have that much needed vacation. You will never be sorry and I am sure you will gain much in breadth and knowledge.

See you at Poland Spring.

STEPHEN A. COBB, M. D.,
President, Maine Medical Association.

EDITORIAL

MOST PSYCHOSOMATIC PATIENTS FEAR CURE MORE THAN DISEASE

Doctor Cites Many Ways In Which Patients With Psychosomatic Illness Resist Or Sabotage Treatment

One should suspect that a disease is psychosomatic when a patient shows signs of sabotaging his own cure, writes Andrew D. Hart, M. D., Charlottesville, Va., a member of the Department of Internal Medicine of the University of Virginia School of Medicine, in a recent issue of *The Journal of the American Medical Association*.

A psychosomatic disease is one in which organic changes arise from the ways in which the patient reacts to personality conflict and insecurity. Yet "patients with psychosomatic disease may show little or no evidence of emotional instability," Dr. Hart points out. This, he says, adds to the doctor's difficulty in diagnosis only if he fails to recognize that the outward symptoms of psychosomatic illness are valuable to the patient precisely because they substitute for a more open expression of inner conflicts which the patient feels inadequate to face. He has learned to live with illness; he has not learned to live with himself.

"Although an ill person must consciously and rationally attempt to seek relief for manifest symptoms and disability, there are unconsciously motivated resistances to such attempts that block their success. Indeed, it might be expected that every dynamic resource of the organism would be called into action to protect the illness and maintain its expressions until the greater threat to personality security had been lessened or resolved," Dr. Hart writes.

Among the many ways in which such patients resist cure, he mentions the following:

1. Procrastination in seeking medical attention. "Patients with psychosomatic complaints are seldom seen early in the course of their illnesses."

2. Self treatment. "Many patients indulge in self diagnosis and protracted self treatment, despite the availability and rationale of adequate medical care. . . . It is perhaps the most reliable characteristic of patients with psychosomatic illness that in submitting to medical care they reserve for themselves a greater independence of action in decisions as to choice of procedure and detail of treatment."

3. Sabotage of treatment. "Broken diets, renewed habits, unfilled and unopened prescriptions, forgotten medications, fractured routine and disregarded advice."

4. Broken appointments. "In many instances only an initial appointment is kept and it is apparent that the person has acquiesced in consulting the physician as a gesture only and is not seriously entertaining plans for treatment."

5. Medical shopping. "Numerous physicians are consulted one after another without giving any of them a satisfactory opportunity for systematized investigation of the illness."

6. Limitation of treatment. "In spite of the presence and persistence of general symptoms, a single major complaint is assumed by the patient to be the only significant abnormality; particular treatment for it is undertaken year after year, to the vigorous exclusion of more complete investigations."

7. Patronage of cults. "A willingness to accept lay advice, hopeful reliance on patent remedies, an enthusiasm for medical fads and support of the cults. There is an inappropriate bent and loyalty to methods and systems that temporize with illness through policies of suggestion, reassurance and palliation."

8. Vagueness and evasiveness in the recital of complaints.

9. Excessive preoccupation with irrelevant detail.

10. Complacency, "particularly if the disease has progressed to some tangible and socially recognized pattern of structural defect." This is particularly noticeable in cases of obesity caused by overeating.

11. Relief of tension and anxiety following the development of unmistakable physical symptoms and tangible structural defect.

12. Hypersensitiveness and intolerance to personality study.

13. Denial of significant personality insecurity or conflict.

14. Misleading explanations of the causes for obvious worry and distress.

15. Claims of improvement or cure after treatment with remedies that could, at best, offer only temporary benefit.

"Many patients appear to give up their resistance or to succumb to cumulative pressures for study and treatment only when, through alteration of internal or external factors in the basic insecurity situation, a resolution of the total illness is impending," Dr. Hart concludes.

"On the other hand, patients who injudiciously allow external pressures to force them into premature or hasty treatment and decision may become seriously anxious and depressed unless illness equivalents have been effectively established. A physician-patient relationship may constitute such a substitution and in competent treatment should serve as a bridge to the development of other identifications compatible with reeducative goals and health."

CORRESPONDENCE

April 19, 1948

Frederick Carter, M. D.
Editor, MAINE MEDICAL JOURNAL
Portland, Maine

Dear Doctor Carter and All Members of the Maine Medical Association:

This letter is being written for publication in the MAINE MEDICAL JOURNAL prior to the 1948 annual meeting of the Association because of two particularly important topics, one of which will be definitely set for final action at said meeting. It is extremely important to a large number of the members of our Association that this, or some similar message, be distributed to each and every member.

The matters of importance are: 1—The Wagner Health Bill or the Taft Health Bill, or any modifications; and 2—The Proposed Prepaid Medical Care Plans by way of Insurance as fostered by the Maine Medical Association. It is imperative to each and every physician in these United States to take a definite and decided stand relative to so-called "Socialized Medicine" and to each and every physician in the State of Maine to take a definite stand relative to Insurance or other Prepaid Medical Care in Maine.

I should strongly urge that each and every regular M. D. in these United States of America solemnly declare his position relative to any present or future legislation for compulsory Government Medical Care to be definitely that:

"He will continue to practice medicine and care for all persons requesting and requiring medical or surgical care in the capacity of a private physician, but will have no part with the care of ill patients, regardless of the nature of such, under Government Dictation and strict regulation, as of Socialized Medicine:"

- 1. Primarily it is definitely believed that such action, unless applied to every branch of business, profession, industry, etc., is unconstitutional, and cannot be thrust or forced on any single group or profession—unless Socialization and Communization of our Country becomes a fact.
 - a. The Marshall Plan of raising billions and more billions, about which there is so much controversy, politically or for the sake of humanity, is a bitterly fought project in Washington, D. C. to prevent Communism in parts of Europe—and is being waged affirmatively by many of the same individuals who are attempting to make of the medical profession the only part of American Life which has been communized.

- 2. If we physicians flatly and definitely Man our own Guns on this attempt at a travesty against Democracy and the so-called Four Freedoms then no cry of Bolshevism can be pointed at us at some later date when and if political moves succeed in passing any pending legislation, or substitute therefor, concerned with this problem.

We have all recently received the recommendations of the Committee of the Maine Medical Association of the Proposed Prepaid Medical Care Plans on a Voluntary Prepaid Surgical and Obstetrical Insurance Plan. There are many reasons why this or other similar or substitute measures seem unwise to promote, adopt or support. Some few of these reasons for opposing this matter will be given as briefly as possible but before stating them, may I commend the Committee on much hard work in trying to present a matter, which it was apparently the wish of a portion of the membership of our Association, for favorable consideration at our next Annual Meeting.

I would strongly urge that every member of our Association either attend the Annual Meeting, or have their County Delegate (s) fully instructed, to vigorously oppose this plan for the following reasons:

- 1. This proposed plan amounts to a mere preliminary step as a forerunner of Government Medicine (Socialized Medicine), possibly to hysteria or an escape mechanism of ours, by which the promoters of the Government Plan (s) will readily recognize the fear of the profession itself — and it is not at all sufficient to terminate present or future efforts at Socialization of our profession.
- 2. In Hancock County, and from friendly colleagues in several other counties, there is no evidence whatever of any desire for such a plan at present or in the future.
- 3. Surgical and obstetrical patients only, cared for in an organized hospital — and not elsewhere — and who fall in a definite income group (\$2,000.00 to an aggregate of \$3,000.00 per year per family) are the only ones to completely benefit so far as physicians' charges are concerned, and regardless of the amount of insurance carried there is no provision for the greater bulk of medical fees.
- 4. If our effort is to improve the Health and decrease the illness and discomfort by providing more specific care to all persons in Maine, we are failing to provide for the sub-marginal income, or indigent, group other than by the generosity of individual physicians who continue to care for them gratis either in home, office or hospital.

5. The additional clerical work and disagreements, often with additional necessity of appearing at hearings or arbitration meetings, in dealing with Insurance Cases certainly makes manifest that any and all of us, who go into this plan if it is adopted, definitely realize that much of our work may become administrative or executive in nature. Very few, if any, physicians would have the time personally or feel financially able to employ the necessary extra clerical help to keep pace with the complete and often multi-copy forms of report which would be involved as well as detailed itemization of any statements rendered.
6. The actual need for any such action, other than its promotion by the A. M. A. Headquarters, some members of the Maine Medical Association, and scattered individual physicians throughout the country, has not been established in any measure.
7. There is no reason why we as a group or as individuals should fall into a trap of trying to substitute for something which we actually know cannot be constitutional unless it applies to all groups and all persons.
8. Adoption of this measure cannot improve the quality or quantity of medical care in any way as is only too manifest on the surface.

Gentlemen of the Maine Medical Association and of the various County Medical Societies, I wish to urge you to see that this, and any similar measures,

be unfavorably acted upon by an impressive majority of the Association. And, because I firmly believe that such action is both unnecessary and unwise for all physicians and all patients, I strongly urge and advise serious study of all aspects and the potentialities involved in signing up to serve as one favoring this radical step if it is favorably acted upon in June, 1948, at which time the majority of members will not have had the time to intelligently analyze and digest its potentialities. Let us not have our own voluntary act serve as an "entering wedge" by which Socialized Medicine becomes a fact through demand of a mis-informed laity who believe that Prepaid Health Insurance Plans are actually physician sponsored, for they are not.

The statement, "The opinion of a few well-informed physicians on delivery of medical care may well be of more value than the votes of larger numbers of physicians who are insufficiently informed or mis-informed," must be specifically challenged and interpretation of the personal or other reasons for any physician to make such a statement leaves much for conjecture in the minds of so many of us who care for a large number of the ill people in each State and the Nation and yet who are considered "insufficiently informed or mis-informed."

Gentlemen, this must not pass if you wish to retain your identity as members of the time honored Medical Profession.

Very truly yours,

RAYMOND E. WEYMOUTH, M. D.

May 7, 1948

Dr. Frederick Carter
Editor, MAINE MEDICAL JOURNAL
142 High Street
Portland, Maine

Dear Dr. Carter:

Dr. Weymouth is to be commended for the public statement of his convictions in regard to voluntary health insurance. The objections he raises deserve the careful and thoughtful consideration of all Maine Physicians. To this end let us review his letter in detail.

The Committee fully agrees with Dr. Weymouth in his dislike for compulsory medical insurance as displayed in the Wagner-Murray-Dingell Bill. However in the long and exhaustive hearings on the present Wagner-Murray-Dingell Bill, S. 1320, the question of its constitutionality has not been raised and if such a question exists, it seems certain that it would have been brought up.

Voluntary health plans must not be confused with compulsory health insurance. Government enters in no way into the insurance plan under consideration. The plan is an insurance contract to which participating physicians would subscribe for a period of one year.

At the start the plan will provide for surgical and obstetrical patients only, since insurance carriers do not yet have the statistical data necessary to determine the premium rates for full coverage including house and office calls in minor illness. It is expected that it will eventually be possible to add these features.

The plan does not state that all patients must be cared for in hospitals. The fee schedule lists minor surgical procedures which could be done in the physician's office.

Furthermore the plan fails to provide for the indigent. These patients are treated in our clinics, in the ward services of our general hospitals or else, as Dr.

Continued on page 140

PROGRAM IN BRIEF
Maine Medical Association
Ninety-Fourth Annual Session
POLAND SPRING HOUSE
Poland Spring, Maine
SUNDAY, MONDAY and TUESDAY
JUNE 20, 21, 22, 1948

Arranged by the Scientific Committee

Francis A. Winchenbach, M. D., Chairman
Martyn A. Vickers, M. D.
Theodore E. Hardy, M. D.
Carl E. Richards, M. D.
Frederick R. Carter, M. D., Secretary, ex-officio

SUNDAY, JUNE 20, 1948

3.00 P. M.

First Meeting of the House of Delegates

7.00 P. M.

Dinner

8.30 P. M.

Guest Speaker:

Mr. Mickey MacDougall, Nationally Famous Card
Detective

MONDAY, JUNE 21, 1948

9.00 A. M.

General Assembly:

President Stephen A. Cobb, M. D.,
presiding

Announcements:

Francis A. Winchenbach, M. D., Chairman,
Scientific Committee

Frederick R. Carter, M. D., Secretary

9.30-11.30 A. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Carl E. Richards, M. D., Sanford, Chairman

1. Maurice Ross, M. D., Sanford
Transition—Thirty Years of Trends in Medicine
2. Theodore C. Bramhall, M. D., Portland
Office Gynecology for the General Practitioner
3. D. H. R. Lester, M. D., Bellevue Surgical Staff
To be announced
4. To be announced
5. To be announced

SPECIAL BUSINESS MEETING OF THE MEDICO-LEGAL SOCIETY
AT 10.00 A. M.

12.30 P. M.

Luncheon:

A table will be reserved for Past Presidents of the
Maine Medical Association

A table will be reserved for Ladies interested in forming
a Woman's Auxiliary to the Maine Medical Association

2.00-4.00 P. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Introduction of Visiting Delegates

MAINE MEDICO-LEGAL SOCIETY CONFERENCE

George L. Pratt, M. D., Farmington,
Chairman

2.00 P. M.

1. Presentation of case by Joseph E. Porter, M. D.,
Portland
Comments by Lawyers for both Prosecution and
Defense

3.00 P. M.

2. Address by Mr. Edward Soucy, Agent in Charge of
the New England Division of the Federal Bureau
of Investigation
Subject: Laboratory Methods of the F. B. I.

4.30 P. M.

Election of President-elect

Second Meeting of the House of Delegates

7.00 P. M.

Dinner

8.30 P. M.

Speakers:

Arthur Conard, M. D., Chicago

Federal Judge Edward Curran, Washington, D. C.

[OVER]

TUESDAY, JUNE 22, 1948

9.30-11.30 A. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Symposium on Hypertension

Theodore E. Hardy, M. D., Waterville, Chairman
 Wilfrid J. Comeau, M. D., Bangor—Cardiology
 Howard F. Hill, M. D., Waterville—Ophthalmology
 Joseph Memmelaar, M. D., Bangor—Urology
 Kenneth W. Sewall, M. D., Waterville—Obstetrics
 Gilbert Clapperton, M. D., Lewiston—Anaesthesiology
 George F. Maltby, M. D., Portland—Neurosurgery

12.30 P. M.

Luncheon

2.00-4.00 P. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Martyn A. Vickers, M. D., Bangor, Chairman

1. President's Address

Stephen A. Cobb, M. D., Sanford

2. Maine Committee on Fractures and other Trauma presents

"Management and Treatment of Head Injuries"

George F. Maltby, M. D., Portland
 Howard F. Hill, M. D., Waterville
 Frederick T. Hill, M. D., Waterville
 Leo Geisen, M. D., Waterville
 Howard L. Apollonio, M. D., Rockland

3. Vocational Rehabilitation

Harold E. Small, M. D., Augusta

7.00 P. M.

Annual Dinner

8.00 P. M.

Presentation of Fifty-Year Medals by President Stephen A. Cobb

8.30 P. M.

Speakers:

Major General Lewis B. Hershey, Washington, D. C.
 John Nicol Mark, Humorist

OTHER ACTIVITIES

A Golf Tournament will be held with prizes for members, ladies and guests

Program for the ladies to be announced

Convention Rates

Poland Spring House

Poland Spring, Maine

The Convention Rates for the 1948 Annual Session
 are as follows:

Double room with twin beds and private bath—
 \$12.00 per person per day.

Two double rooms with twin beds and connecting bath, or a double room and single room with connecting bath—\$12.00 per person per day.

Single room with private bath—\$14.00 per day.

Single or double room without bath—\$10.00 per person per day.

Charge for non-registered guests for meals will be as follows:

Breakfast	\$1.50
Luncheon	3.00
Dinner	3.00
Banquet	4.00

MAKE YOUR RESERVATIONS NOW!

COUNTY SOCIETIES

Androscoggin

President, Paul R. Chevalier, M. D., Lewiston
Secretary, Glidden L. Brooks, M. D., Lewiston

Arroostook

President, Gerald H. Donahue, M. D., Presque Isle
Secretary, Clyde I. Swett, M. D., Island Falls

Cumberland

President, Harold J. Everett, M. D., Portland
Secretary, Joseph E. Porter, M. D., Portland

Franklin

President, Maynard B. Colley, M. D., Wilton
Secretary, Kenneth A. LaTourette, M. D., Farmington

Hancock

President, M. A. Torrey, M. D., Ellsworth
Secretary, Robert H. Delafield, M. D., Ellsworth

Kennebec

President, William L. Gousse, M. D., Fairfield
Secretary, Arch H. Morrell, M. D., Augusta

Knox

President, Wesley N. Wasgatt, M. D., Rockland
Secretary, Freeman F. Brown, Jr., M. D., Rockland

Lincoln-Sagadahoc

President, Stanley R. Lenfest, M. D., Waldoboro
Secretary, Donald B. Hawkins, M. D., South Bristol

Oxford

President, Willard H. Boynton, M. D., Bethel
Secretary, Dexter E. Elsmore, M. D., Dixfield

Penobscot

President, Martin C. Madden, M. D., Old Town
Secretary, Herbert C. Scribner, M. D., Bangor

Piscataquis

President, George C. Howard, M. D., Guilford
Secretary, Norman H. Nickerson, M. D., Greenville

Somerset

President, George F. Sullivan, M. D., Bingham
Secretary, H. Carl Amrein, M. D., Madison

Waldo

President, John A. Caswell, M. D., Belfast
Secretary, Raymond L. Torrey, M. D., Searsport

Washington

President, John F. Hanson, M. D., Machias
Secretary, John Young, M. D., Jonesport

York

President, Paul S. Hill, Jr., M. D., Saco
Secretary, C. W. Kinghorn, M. D., Kittery

COUNTY SOCIETY NOTES

Cumberland

A regular meeting of the Cumberland County Medical Society was held at the Eastland Hotel, Portland, at 5.00 P. M. on April 30, 1948; Dr. Harold J. Everett presiding. The society voted 20-16 to instruct its delegates to vote favorably at the annual meeting of the Maine Medical Association for the prepaid medical care plan as outlined by Dr. Drake's committee of the Maine Medical Association.

It was voted that the secretary send a questionnaire to all members of the Cumberland County Medical Society to determine how many would be willing to answer emergency night calls, so that such a list could be made available in the various hospitals, police stations, telephone office, etc.

The application of Dr. Albert Aranson for transfer from the Massachusetts Medical Society was unanimously approved, and the application of Dr. Walter Penta was favorably acted upon.

It was voted that the names of Drs. Elbridge Stetson of Brunswick and Jerome Fickett of Naples be sent to the Maine Medical Association as recipients of the 50-year medal.

Dr. Joseph Ridlon suggested that the Maine Medical Association consider the classification of associate membership for doctors who have retired, or who may be active in Maine but stationed here for a short time in the armed forces or in the Public Health Service.

Dr. Stephen Brown suggested that the delegates from the society be instructed to support any resolutions which might arise in the meeting of the House of Delegates with respect to the recommendation by the Maine Medical Association that the State assume more of a responsibility for indigent patients in the various hospitals of the State.

The principal paper of the evening was given by Dr. John Rock of the Women's Free Hospital, Boston, Mass. His subject was "The Development of the Ovum and the Causes of Early Abortion." The paper was excellently presented, and was supplemented by a beautiful series of lantern slides. An interesting discussion followed.

Respectfully submitted,

JOSEPH E. PORTER, M. D.,
Secretary.

Hancock

The 228th meeting of the Hancock County Medical Society was held at the Hancock House, Ellsworth, April 14, 1948. There were thirteen members present. Mr. W. Mayo Payson, Executive Secretary of the State Association, was present as a guest.

The meeting was called to order by the President, Dr. M. A. Torrey, and the minutes of the previous meeting were read and approved.

Discussion was opened in regard to prepaid medical care and a motion was passed to postpone definite action in regard to instruction to the delegate until the next meeting. Mr. Payson discussed the proposed plan.

Dr. Albert W. Fellows, of Bangor, presented a paper on "Pediatric Problems in General Practice."

ROBERT H. DELAFIELD, M. D.,
Secretary.

York

The spring meeting of the York County Medical Society was held at Hillcroft Inn, York Harbor, Maine, on April 14, 1948. A very fine steak dinner was served.

The meeting was called to order about 3.00 P. M. with the usual business matters cared for.

George R. Bancroft, M. D., of Kennebunkport, and Frank W. Barden, M. D., of Saco, were elected to membership.

Dr. George O. Cummings, of Portland, gave a talk on the prepaid medical care plan as outlined by Dr. Drake's committee of the Maine Medical Association.

The Resolutions Committee was instructed to bring in resolutions to the State Association, that no dues be charged members after reaching the age of 70 years.

The speakers—Drs. Joseph A. Porter, James M. Parker, Theodore C. Bramhall and Isaac M. Webber, all of Portland—gave a very interesting and instructive talk on "Diagnosis and Treatment of Accessible Cancer."

There were 38 members and guests present—the largest attendance for years.

C. W. KINGHORN, M. D.,
Secretary.

New Members

Androscoggin

Donald L. Anderson, M. D., 54 Pine Street, Lewiston, Maine.

Henry C. Thacher, M. D., 34 Court Street, Auburn, Maine.

Cumberland

Albert Aronson, M. D., Cushing V. A. Hospital, Framingham, Massachusetts (by transfer from the Massachusetts Medical Society).

Walter E. Pento, M. D., 316 Woodford Street, Portland, Maine.

Franklin

Irving E. Brown, Jr., M. D., Rangeley, Maine.

Washington

John Kozutore, M. D., Machias, Maine.

York

George R. Bancroft, M. D., Kennebunkport, Maine.

Frank W. Barden, M. D., Saco, Maine.

Deceased

Cumberland

Clement S. Wilson, M. D., Brunswick, Maine
Died: April 27, 1948

Somerset

Fred E. Eorle, M. D., Weeks Mills, Maine
Died: April 22, 1948

York

Horry L. Prescott, M. D., Kennebunkport, Maine
Died: April 13, 1948

HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

NEWS AND NOTES

Stephen A. Cobb, M. D., of Sanford, President of the Maine Medical Association, was elected President of the Council of the New England State Medical Societies at a meeting held in Boston, April 22nd.

Frederick T. Hill, M. D., of Waterville, was elected President of the American Laryngological Association at the annual meeting held April 15th at Virginia Hot Springs.

Francis H. Sleeper, M. D., of Augusta, Superintendent of the Augusta State Hospital, has been elected President of the New England Psychiatric Association.

State of Maine

Board of Registration of Medicine

Adam P. Leighton, M. D., 192 State Street, Portland, Secretary.

List of physicians licensed in the State of Maine March 10, 1948.

Through Examination

Eugene Ellis Brown, M. D., Bangor, Maine.
Charles Perley Gray, M. D., New York City, N. Y.
Frederic Matthew Howard, M. D., Chestnut Hill, 67, Mass.

Natan Koplowitz, M. D., New York City, N. Y.
Edwin Moor Lord, M. D., Lewiston, Maine.
Valentine Joseph Moore, M. D., Lewiston, Maine.
Jean Paul Nadeau, M. D., Lewiston, Maine.
Joseph Samuel Rangatore, M. D., Gardiner, Maine.
Charles Edward Skillin, M. D., South Portland, Maine.
Maurice P. G. St. Aubin, M. D., Boston, Mass.
Charles L. Stone, M. D., Brooklyn 16, N. Y.
Ray Lester Whitney, M. D., Cape Porpoise, Maine.
Richard Blaisdell Wingate, M. D., Amesbury, Mass.
Israel Zeltzerman, M. D., Augusta, Maine.

Through Reciprocity

George Raymond Bancroft, Jr., M. D., Kennebunkport, Maine.

Frank W. Barden, M. D., Farmingdale, N. Y.
Victor Ira Barrows, M. D., North Wildwood, N. J.
David S. Broughton, M. D., Framingham, Mass.
Wallace H. Duffy, M. D., Lewiston, Maine.
Ola Wilfred Hodgdon, M. D., Andover, Maine.
Robert Gordon MacBride, M. D., Lubec, Maine.
Edward Phillips Wells, M. D., Hanover, N. H.

Bureau of Health

Services for Crippled Children

Clinic Schedule, 1948

EXTENSION OF THE RHEUMATIC FEVER PROGRAM STATE SERVICES FOR CRIPPLED CHILDREN

A new children's clinic was started in Bangor. The clinic is held in the Eastern Maine General Hospital once a month.

Children up to the age of twenty-one years suffering from acquired and congenital heart disease may be referred. Referrals should be sent to the Division of Services for Crippled Children, State House, Augusta. The center serves as a diagnostic center for Somerset, Piscataquis, Penobscot, Hancock, Washington and Aroostook Counties; as a treatment center for Bangor and the surrounding area.

Bangor—Eastern Maine General Hospital, 10.00 A. M.: May 28, June 25, July 23, August 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

By appointment only.

ORTHOPEDIC CLINICS

Portland — Maine General Hospital, 11.00 a. m.: Jan. 12, Feb. 9, Mar. 8, Apr. 12, May 10, June 14, July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.

Lewiston — Central Maine General Hospital, 9.00-11.00 a. m.: Jan. 23, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Rumford — Community Hospital, 1.30-3.00 p. m.: Feb. 18, Apr. 21, June 16, Aug. 18, Oct. 20, Dec. 15.

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 26, Apr. 22, June 24, Aug. 26, Oct. 28, Dec. 23.

Rockland — Knox County Hospital, 1.30-3.00 p. m.: Feb. 19, May 20, Aug. 19, Nov. 10 (Wednesday).

Machias — Normal School, 1.30-3.00 p. m.: Feb. 11, Apr. 14, June 9, Aug. 11, Oct. 13, Dec. 8.

Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.30-3.00 p. m.: Jan. 20, Mar. 3, May 4, July 7, Sept. 14, Nov. 3.

Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: Mar. 2, July 6, Nov. 2.

Fort Kent — Normal School, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Jan. 21, May 5, Sept. 15.

Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: Jan. 29, Mar. 25, May 27, July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 25, June 23, Oct. 27.

By appointment only.

PEDIATRIC CLINIC SCHEDULE — 1948

Bangor — Eastern Maine General Hospital, 1.30 p. m.: Jan. 30, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Waterville — Thayer Hospital, 1.30 p. m.: Jan. 6, Feb. 3, Mar. 2, Apr. 6, May 4, June 1, July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.

Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: Jan. 28, Mar. 24, May 26, July 21, Sept. 22, Nov. 17.

By appointment only.

Venereal Disease Clinics

The Department of Health and Welfare, Bureau of Health, maintains facilities for the diagnosis and treatment of venereal diseases in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford,
Lewiston, Portland, Rockland, Rumford,
Sanford, Waterville, Wilton and Winthrop.

Any physician wishing to refer an indigent person for diagnosis or treatment may obtain the name of the nearest clinic physician by contacting the Department of Health and Welfare, Bureau of Health, State House, Augusta, Maine. If no clinic facilities are available, physicians will be authorized to

treat indigent patients in their offices. Authorization should be requested before treatment is started.

University of Pennsylvania Medical Alumni

University of Pennsylvania Medical Alumni will hold a dinner at the Convention of the American Medical Association in Chicago, Wednesday, June 23, 1948, at the Lake Shore Club, 850 Lake Shore Drive. On arrival in Chicago, alumni should contact Miss Frances R. Houston, Executive Secretary of the Medical Alumni Society, at the University of Pennsylvania registration booth.

Correspondence—Continued from page 134

Weymouth states, by the generosity of individual physicians. The medical profession has always cared for such persons largely without remuneration and we must continue to do so, unless we wish to accept pay from some governmental agency which would in truth be a "preliminary step as a forerunner of Government Medicine."

Forms for the reporting of illness would be similar to those now used in health and accident insurance. An abbreviated report form has been submitted for approval to the American Medical Association by insurance carriers. Hearings to determine degree of disability required of the Industrial Accident Commission would not be necessary.

Reports of numerous surveys of the need for better distribution of medical care are available for study. The American Medical Association, in which we hold membership, has employed experts to conduct its own survey. "The actual need for any such action" is perhaps best shown by the fact that voluntary medical care plans are now in operation in forty-two of the states of the Union. This does not include the local insurance plans which have been set up by many of the largest employers of labor in our own state.

This Committee was appointed nearly two and a half years ago to study medical care plans and to report to the House of Delegates. Considerable time has been spent in reading, interviews and conferences

in order to accomplish this purpose. The Committee believes that there is need for such a plan in Maine. We think the proposed form of insurance sold by insurance companies is the best plan available to us. We expect the insurance plan would work successfully in Maine as it has in other states and we favor its adoption. The Committee has no desire or intention to attempt to force the passage of a measure which fails to fulfill the desires of our members. We do wish to make the best of every opportunity to explain the proposed plan to every county society in order that the members may be well informed.

It is surely the province of the House of Delegates, not of this Committee, to determine whether this plan is practicable, whether it is in the best interests of the public health, whether more time is necessary for its study, and whether a referendum needs to be held. The Committee has entire confidence that the House will decide these questions only after thorough and thoughtful consideration.

The Committee for Study of Voluntary Prepaid Medical Plans:

EUGENE H. DRAKE, M. D.,
Chairman.

GEORGE O. CUMMINGS, M. D.
EDWARD L. HERLIHY, M. D.
M. TIECHE SHELTON, M. D.
CLYDE I. SWETT, M. D.
FRANK A. SMITH, M. D.

The toxicity of streptomycin now appears to be sufficiently great to deny use of the drug to those patients who are making satisfactory progress under conventional forms of treatment. At present, most experienced physicians prefer to reserve the limited supply for patients more acutely ill, and especially for those in whom the disease has been progressive dur-

ing recent months, and no other treatment is likely to be effective. Streptomycin is of no lasting or significant benefit to patients who apparently have hopeless, destructive types of pulmonary tuberculosis. H. McLeod Riggins, M. D., and H. Corwin Hinshaw, M. D., *Am. Rev. Tbc.*, Aug., 1947



“... a considerable reservoir of unsuspected and unreported amebiasis has been brought back to the United States....”¹

Urging clinicians and roentgenologists to be on the alert for signs of this disease, Wilbur and Camp² note the frequency with which the radiologist finds unsuspected lesions, ultimately diagnosed as amebiasis.

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**RESEARCH
IN THE SERVICE
OF MEDICINE**

1. *Editorial: The Problem of Amebiasis, J.A.M.A. 134:1095 (July 26) 1947.*
2. *Wilbur, D. L., and Camp, J. D.: Amebic Disease of the Cecum: Clinical and Radiological Aspects, Gastroenterology 7:535 (Nov.) 1946.*
3. *Morton, T. C. St. C.: Diodoquin for Chronic Amoebic Dysentery in Service Personnel Invalided from India, Brit. M.J. 1:331 (June 16) 1945.*

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No. 6

TREATMENT OF ACUTE COMPLICATIONS OF DIABETES

GARFIELD G. DUNCAN, M. D., Philadelphia

In dealing with the treatment of acute complications of diabetes, one should mention the growing importance of this subject. Many of you are familiar with the survey that has been completed relatively recently, in Oxford, Massachusetts, by the Department of Public Health, and sponsored by Dr. Joslin. It is estimated on the basis of this survey that there are two million diabetic patients in this country, rather than the estimate of one million previously given. Every one of these patients will, at one time or another, present himself or herself to his or her physician suffering from an acute complication of the diabetes, hence the importance of the management of these patients during crises.

Diabetes, *per se*, has ceased to be a cause of death. Diabetes is made worse by acute episodes—infections and acute febrile disturbances—and, unless the disorder is controlled during these periods, the patient is likely to emerge with a more severe diabetes as a result.

This aspect attaches considerable importance to the work of Dohan and Lukens in Philadelphia. They have been able to cause permanent diabetes in cats by injecting glucose intraperitoneally. They have found hydropic degeneration of the Islands of Langerhans in all different phases until the cat dies in diabetic coma. If the diabetes is adequately and promptly treated, the process is reversible.

Presented at the 93rd Annual Session of the Maine Medical Association at York Harbor, Maine, June, 1947.

The aim in the treatment of the acute complications of diabetes is divided as follows: First, specific therapy directed at correcting the complications, notably chemotherapy, streptomycin and penicillin; second, control of the diabetes; and third, adequate nutrition should be provided. I know of no complications of any other disease that requires more constant supervision. Actually, a patient with diabetes, having acute complications, should have his condition re-evaluated every six hours, day and night, until the acute phase is over. Why I select every six hours will be made clear shortly.

The protein allowance is liberal. There are 115 grams of protein in the sample diet, see Table 1. This represents quite a change from ten or fifteen years ago, when it was customary to prescribe 60 or 70 grams of protein for the average adult patient. Now we recommend 115 grams of protein daily during acute complications and 250 grams of carbohydrate, with enough fat to bring the total calories to the equivalent of 30-35 per kilogram of body weight.

This diet is divided into four equal feedings. During the acute, early phase of the pneumonia, or whatever the complication is, it may be given in liquid form. But, one-quarter of the total diet is given at each of the following times: 9:00 A. M., 3:00 P. M., 9:00 P. M., and 3:00 A. M. The advantages of distributing the diet in this manner are many. In the first place, if a blood sugar value is secured before one of these meals, it should closely

approximate values that would be found before each of the other three meals—when there is equal distribution and division of both diet and insulin, one blood sugar test in twenty-four hours gives us, for practical purposes, more information than it would

if the diet and insulin were unevenly distributed.

In Table 1, liquid formulae for one meal are presented. They may be used for each of the 4 meals in each 24 hours, making suitable substitutions to prevent monotony.

TABLE 1
SINGLE LIQUID MEAL UTILIZED IN THE TREATMENT
OF ACUTE COMPLICATIONS OF DIABETES
(Four Liquid Feedings, each providing: P. 29, F. 24, C. 63, Cal. 584)

Food	WT. (GM)	Household Measure	Pro.	Fat	Carbo.	Calories
Milk, Whole	360	1½ c.	12	13	18	237
Eggs, Whole (beaten slightly)		2	14	10	—	146
Sugar	12	2½ tsp.	—	—	12	48
Vanilla, if desired						
Grapefruit,* Fresh	200	1 c. scant	—	—	18	72
Sugar	15	1 tbsp.	—	—	15	60
Egg White, Beaten or	30	1 av.	3	—	—	12
Gelatin	3	1 tsp.				
Total			29	23	63	575

* Substitutions (1) Orange or Pineapple Juice, ¾ C.
(2) Grapefruit Juice, Unsweetened, ½ C.
(3) Prune Juice, ¾ C. Scant.

Liquid formulae are replaced by soft and finally "solid" food as progress warrants.

control of the diabetes will depend upon the severity of the diabetes. Recommended initial doses are illustrated in Table 2.

The amount of insulin to be prescribed to secure

TABLE 2
ADJUSTING INSULIN BECAUSE OF ACUTE COMPLICATIONS
(ILLUSTRATIVE EXAMPLES)
INSULIN PROGRAM

<i>Prior to Complication</i>		<i>During Complication</i>	
(1)	No Insulin	8- 8- 8- 8	Crystalline Insulin
(2)	40 Units P.Z. Insulin or 40 Units Globin Insulin	12-12-12-12	" "
(3)	80 Units P.Z. Insulin 12 Units Crystalline Insulin	25-25-25-25	" "
(4)	80 Units P.Z. Insulin 24 Units Globin Insulin	30-30-30-30	" "
(5)	96 Units P.Z. Insulin 24 Units Crystalline Insulin (A.M.) 12 Units Crystalline Insulin (P.M.)	36-36-36-36	" "

Even the patient with mild diabetes and ordinarily not needing insulin should be given regular or crystalline insulin as a safeguard and as an aid in keeping the diabetes under control at a time when it is most likely to get out of hand. Eight units at 6-hour intervals is a safe dosage to begin with and alterations upwards or downwards will be dictated by the degree of or absence of glycosuria. The patient receiving 40 units of protamine zinc insulin or 40 units of globin insulin may be safely started on 12 units of regular insulin at 6-hour intervals; the patient receiving 80 units of protamine zinc insulin and 12 units of crystalline insulin may be given 25 units of crystalline insulin at 6-hour intervals; 80 units of protamine zinc insulin and 24 units of globin insulin may be substituted by 30 units of crystalline insulin every 6 hours; and the regimen of 96 units of protamine zinc insulin and 24 units of crystalline insulin in the morning and 12 units of crystalline insulin before supper, may be replaced by 38 units every six hours. These are illustrative initial dosages. Further temporary increases are the rule.

The use of crystalline insulin to the exclusion of other insulin preparations has, in my experience, the advantage of easy manipulation with a more predictable effect on the blood sugar than is possible during complications if the therapy is confused by using slowly and rapidly acting insulins. The shifting from the pre-complication insulin regimen to the equal division and distribution program gives more acute control of the diabetes, much as one has more control of an automobile when the gears are shifted from high to low gear.

Fractional urines are collected over each six-hour period and the results of the examination at the end of each such period determine whether the insulin dosage due should be increased or reduced. Four plus reactions for glycosuria indicate increases with each dose until the glycosuria is corrected. Some patients require enormous amounts of insulin to accomplish this.

The ease with which the diabetes can be brought under control is illustrated in Table 3 and 4.

TABLE 3
THE SIMPLICITY OF THE CONTROL OF A SEVERE DIABETES DURING A FEBRILE
PHASE OF AN ACTIVE PULMONARY TUBERCULOSIS
A.B., Weight 59 Kg., Height 176 Cm.

Diagnosis: Diabetes Mellitus; Active Pulmonary Tuberculosis

Date 1946	Blood Sugar (Mg.)	Glycosuria and Acetonuria				Insulin (Units)	Diet
		7 A.M. to 11 A.M.	11 A.M. to 4 P.M.	4 P.M. to 9 P.M.	9 P.M. to 7 A.M.		
Oct. 10	308	4+ 4+ —	4+ 1+ —	4+ + —	3+ 0 —	50 P.Z. 24 Globin } before breakfast	P. 100 F. 122 C. 225 Cal. 2500
11		4+ 0 —	2+ 0 —	4+ + —	3+ 0 —	65 P.Z. 24 Globin } before breakfast	" " " "
12*	222	— —	— —	— —	— —	90 P.Z. 30 Globin } before breakfast 8 Crystalline (before supper)	" " " "

Diet and Insulin divided into four equal amounts and given at six-hour intervals

		3 A.M. to 9 A.M.	9 A.M. to 3 P.M.	3 P.M. to 9 P.M.	9 P.M. to 3 A.M.	Crystalline Insulin				
						3 A.M.	9 A.M.	3 P.M.	9 P.M.	
13		+ 0 —	4+ 0 —	0 + —	+ 0 —	32	30	20	20	P. 100 F. 122 C. 225 Cal. 2500
14		0 0 —	0 0 —	0 0 —	0 0 —	20	20	24	24	" " " "
15		0 0 —	+ 0 —	0 0 —	0 0 —	24	24	24	24	" " " "
21	130	0 0 —	0 0 —	0 0 —	0 0 —	20	20	20	20	" " " "

Note: Underscored figures represent results of tests for acetone. P.Z. = Protamine zinc.

* Records of tests for sugar and acetone for this date were lost.

(After G. G. Duncan—Some Considerations of Acute Complications of Diabetes, The Med. Clin. of North America, pp. 407-425, March, 1947.)

One patient was suffering from an active pulmonary tuberculosis (Table 3) and the other from a pyelonephritis. These are not exceptional cases. I

cannot emphasize too strongly that smooth control of the diabetes can be achieved no matter how severe is the complication of the diabetes.

TABLE 4

DIABETES AND PYELONEPHRITIS (CASE VII). THE PROMPT CORRECTION OF MODERATE HYPERGLYCEMIA AND THE GREAT FLUCTUATION IN THE BLOOD SUGAR LEVEL (SEE TEXT) BY EQUAL DIVISION AND DISTRIBUTION OF DIET AND INSULIN

Date 1946	Blood Sugar (Mg.)	Glycosuria and Acetonuria				Insulin (Units)	Diet
		9 P.M. to 7 A.M.	7 A.M. to 11 A.M.	11 A.M. to 4 P.M.	4 P.M. to 9 P.M.		
May 31	238	4+ 0 —	3+ 0 —	3+ 0 —	2+ 0 —	34 protamine 20 crystalline } before breakfast	P. F. C. Cal. 90 38 200 1500

Diet and Insulin divided into four equal amounts and given at six-hour intervals

		8 A.M. to 2 P.M.	2 P.M. to 8 P.M.	8 P.M. to 2 A.M.	2 A.M. to 8 A.M.	Crystalline Insulin				P.	F.	C.	Cal.
						8 A.M.	2 P.M.	8 P.M.	2 A.M.				
June 1	364	3+ 0 —	4+ + —	4+ 0 —	0 0 —	15	15	15	15	"	"	"	"
2		0 0 —	0 0 —	0 0 —	0 0 —	15	15	15	15	"	"	"	"
3	187	0 0 —	0 0 —	0 0 —	0 0 —	15	15	15	15	"	"	"	"
4		0 0 —	0 0 —	0 0 —	0 0 —	15	15	15	15	"	"	"	"

(After G. G. Duncan—Some Considerations of Acute Complications of Diabetes, The Med. Clin. of North America, pp. 407-425, March, 1947.)

Diabetic Ketosis.*1. This complication may develop gradually over a period of several days or longer as the result of poor dietary control or inadequate insulin dosage, or it may be precipitated with amazing rapidity by concomitant acute infections, omission of insulin, diarrhea, vomiting, surgical operations, or thyrotoxicosis. The condition produces anorexia, nausea and vomiting, intense thirst, polyuria, dehydration, pain in the abdomen, listlessness, stupor, and unconsciousness which, if untreated, leads to coma and death. Increasing ketonuria, glycosuria, hyperglycemia, with a marked reduction of the CO₂ combining power of the blood from the normal value of 55 to 60 volumes percent, and strongly positive reactions for acetone in the plasma, are the outstanding chemical evidences of diabetic ketosis.

2. *Treatment*. a. *Insulin*. The most important procedure in the treatment of diabetic coma is the unhesitating use of large amounts of insulin as early after onset as possible, especially during the first two hours.

b. *The tentative diagnosis of diabetic coma is made when four plus glycosuria, four plus acetoneuria, and four plus plasma acetone are found in an acutely ill patient*. When these findings are present:

- (1) Begin treatment immediately. In the average adult with full-blown diabetic coma, the following therapy is indicated at once:

Insulin (crystalline):

40 units intravenously.*

60 units subcutaneously.

* This outline is reproduced, with minor modifications, from the Veterans Administration Technical Bulletin (T. B. 10-29), May, 1947, on Diabetes Mellitus which was drawn up by this author.

* With the exception of this initial dose, all insulin is to be administered subcutaneously.

Fluids and chlorides—1000 cc. normal saline solution intravenously (give rapidly, 15 cc. per minute if systolic blood pressure is below 90 mm. Hg).

- (2) Secure specimens of blood and urine immediately.
- (3) Blood for sugar content, acetone bodies, hematocrit, specific gravity, CO₂ combining power, urea and serum potassium** determinations.

Urine for culture and complete routine analysis.

- (3) Secure urine at two-hour intervals*** for sugar and acetone determinations and blood for plasma acetone, hematocrit, and specific gravity determinations while patient's life is in danger.
- (4) Secure blood specimens for sugar and CO₂ determinations in two hours, and thereafter at four-hour intervals, day and night, until the patient is conscious and retaining nourishment given by mouth. Thereafter, for two days, analyses are to be done on specimens drawn at 8 a. m. and 4 p. m., following which tests need only be done as indications arise.

c. *Treatment During Critical Phases Subsequent to the Preliminary Measures as Outlined Above.* Immediately upon receiving confirmative reports of the blood sugar value and the plasma CO₂ combining power, or within one hour of making the diagnosis, whichever is earlier, begin:

Insulin, crystalline, 50 units subcutaneously at one-half hour intervals until an appreciable reduction of the plasma acetone or increase in the CO₂ combining power is noted. Increases above these amounts will rarely be necessary, but if no decrease in plasma acetone or increase in CO₂ combining power of the blood plasma has occurred after six hours* of therapy, each succeeding dose may be increased by 25 units until such changes are noted. Dangers of a rapidly developing hypoglycemia will be avoided by giving glucose (one litre of five percent solution) intravenously after four hours of therapy. (See below)

** Only in the event of an abnormally low serum potassium level is it wise to give 100 cc. of a two percent solution of potassium chloride intravenously.

*** A retention catheter may be used for this purpose in all cases of bona fide coma, i.e., hyperglycemia with CO₂ combining power below 20 volumes percent. Utmost care should be taken to avoid introducing infection. Immediately prior to removal of catheter, a urine specimen for culture is secured. As a prophylactic measure against systemic infections, 30,000 units of penicillin are administered intramuscularly at three-hour intervals.

* It is usual to see little change in the blood findings during the first four hours, but improvement should be noted by the end of six hours unless unusual circumstances are present.

d. *When to Reduce Insulin.* An appreciable reduction of the plasma acetone and an appreciable increase of the CO₂ combining power of the blood plasma coincide with a lessening of the resistance to insulin. The physician should then be on the alert for the possibility of a rapidly developing hypoglycemia. When the clinical conditions and laboratory findings indicate that the patient is showing satisfactory progress, the insulin dosage schedule on an hourly, and later, two or three hourly basis may be guided as follows:

- 4 plus glycosuria — 30 units.
- 3 plus glycosuria — reduce to 20 units.
- 2 plus glycosuria — reduce to 10 units.
- 1 plus glycosuria — omit dose.
- 0 glycosuria — omit dose of insulin and give 20 gm. carbohydrate.

The reduction of plasma acetone to a trace or an increase of the CO₂ combining power to a value above 40 volumes percent is, if the clinical condition of the patient permits, indication for insulin and diet at six-hour intervals.

e. *Fluids and Salts.* Loss of electrolytes and fluid, often to a marked degree, occurs in the development of diabetic coma. Correction of these deficiencies at the earliest opportunity is imperative. This is best done by the administration of physiological saline solution, in amounts of 1500 to 3000 cc., within the first six hours of treatment. These amounts may need to be repeated in the next six hours and thereafter at less frequent intervals. Fluid administration is given freely while hematocrit values remain above 50 percent, the specific gravity of whole blood above 1055 and the systolic blood pressure below 90 mm. Hg. As soon as the patient's condition permits, broths and warm saline, and later, carbohydrate-containing fluids—strained cereal, gruel, de-carbonated gingerale, sweetened tea, and later fruit juices — should be given. Accurate records of fluid intake and output are essential.

f. *Carbohydrate.* Glucose, 1000 cc. of a five percent solution in normal saline, is injected intravenously, beginning four hours after the first dose of insulin was given, if at this time liquids given orally are not being retained. This is repeated in six hours if the patient is not taking or retaining nourishment by mouth. In many cases, no parenteral glucose is needed at any time and none should be given during the first four hours of treatment.

g. *Alkali.* The administration of alkali usually is not necessary. However, an amount of racemic sodium lactate sufficient to raise the CO₂ combining power to a relatively innocent level — 30 volumes percent — will relieve air hunger rapidly. Larger amounts are contraindicated. The foregoing amount

of alkali is permissible, also, for the critically ill patient with a plasma CO_2 combining power below 15 volumes percent. The transfusion of whole blood is an efficient means of restoring both base and blood volume but is usually unnecessary.

h. *Gastric Lavage—Enema.* The stomach should be emptied of its contents in cases with abdominal distension, abdominal pain, or a history of vomiting. Eight ounces of warm normal saline solution should be left in the stomach. An enema is indicated in nearly every case of coma. It may, however, be delayed until improvement in the patient's condition is noted.

i. *Diet.* When evidence of acute ketosis has subsided, a liquid and soft diet is allowed; for example, protein 100 gm., fat 33 gm., and carbohydrate 250 gm. (1700 calories). This diet is divided into four equal portions with feedings at intervals of six hours; and finally, with complete recovery from the attack, the diet and insulin regimen of the uncomplicated diabetic patient are resumed.

In conclusion, great reductions in the mortality rate of diabetic patients suffering from acute complications have been achieved by adequate control of the diabetes with equal division and distribution of the diet and insulin.

The incidence of diabetic coma has been similarly reduced but early diagnosis and adequate amounts of insulin are essential if the mortality is to be reduced to a minimum.

Finally, close observation of the patient in diabetic coma is imperative if good results are to be achieved. It is impossible to plan the insulin therapy more than a few hours in advance while the patient's life is in danger.

Attention is attracted to more liberal allowances of protein than were formerly employed.

President Piper: I am going to ask Dr. Blaisdell to discuss this paper.

Dr. Blaisdell: I certainly haven't anything to add to what Dr. Duncan has said, but I do want to emphasize what he has said, and I think that perhaps we don't all realize the importance of acetonuria, and the treatment of patients who are in coma, or in acidosis.

As far as the insulin dosage goes, because certainly just as soon as the acetone clears up, it is easy to demonstrate the patients with 25 to 40 percent insulin resistance, so that the minute the acetone clears up, you have to watch the insulin very carefully.

I had the good fortune to study diabetes under and live with Dr. Duncan, in 1925 and 1926, and that was one of the things brought out at that time, and one of the things which never changed since then. It is a rule that certainly isn't going to change.

I have tried to treat quite a number of surgical diabetics on the surgical service and in private surgery and I have been criticized sometimes by the resident, because I didn't give the patients protein, and that is more recently because these men have been taught in the schools, apparently, that these patients, as Dr. Duncan said, have a high protein diet. Well, here is an old lady about 70 to 75 years of age, who has a gangrene leg, and there are acute complications, and acidosis. I would guess that you couldn't get more than 65 or 70 gm. of protein into her.

I believe the majority of the younger patients would eat, certainly.

I am very much in favor of the regular interval feedings, if you can get it into the patient, and, as Dr. Duncan has outlined, we can probably do it pretty well, using four feedings. Instead of using four feedings, I have, at times, in order to get perhaps liberal amounts that the doctor spoke about, I have had to give eight feedings, because the patients wouldn't take as much as I wanted them to take, that is, I would have to make each of the four feedings a double feeding in order to get the amount into the patient that I wanted to get into him.

I think that Dr. Duncan brought out some very important things that are food for thought, and it has always been very interesting, this question of giving glucose to the patient. Of course, some good men, some of the leading men, don't think that perhaps we should do this, and they definitely say that it is unnecessary. But, I don't think that is so, because occasionally, you will get a patient in acidosis or in coma, with strongly positive reactions for blood and urine acetone, and a low blood sugar. I had a patient very recently who well illustrates this. This patient was not doing well after twenty-four hours of treatment.

I had started to treat her in the conventional way, without any glucose. The blood sugar wasn't too high. But she, as I say, had a lot of acetone, and she didn't do well at all.

After twenty-four hours, I got the blood sugar down, to be sure. The dehydration was corrected but I found that I wasn't getting anywhere, because she still showed a lot of acetone. Following the administration of liberal amounts of five percent glucose intravenously a dramatic improvement ensued.

I, personally, haven't used any alkali for the treatment of diabetic coma.

President Piper: Does some one else wish to discuss this paper? Have you any more to say, Dr. Duncan?

Doctor Duncan: I might clear up one point. The four plus acetone in the urine doesn't mean that there must be four plus acetone in the plasma, be-

Continued on page 154

RESECTION OF VAGUS NERVES IN TREATMENT OF PEPTIC ULCER

S. FRANK FOX, M. D., Portland, Maine

During the past three years, resection of the vagus nerves in the treatment of peptic ulcers has been resorted to by many surgeons due to the impetus stimulated by the work of Dragstedt.¹ As yet, no treatment can be considered ideal, either medical or surgical, but certainly sub-total gastric resection and gastro-enterostomy left a great deal to be desired in the treatment of duodenal ulcers prior to the more physiological approach of vagus nerve resection:— obviously, the treatment of duodenal ulcers, by whichever method is resorted to, presupposes a knowledge of the etiology of ulcer, the normal physiology of the stomach and duodenum, the pathologic physiology associated with ulcer, and the various alterations of normal functions produced by various surgical procedures, and with vagus nerve resection in particular. It is our purpose in this paper to discuss these factors—and to present a small series of twelve cases in which resection of the vagus nerves was performed as the only procedure in the treatment of duodenal and gastro-jejunal ulcers.

ETIOLOGY

The experimental work of Mann, Williamson, Bruce Morton,² Matthews,³ and Dragstedt,¹ has definitely shown that whatever may be the cause or causes of local necrosis, the digestive action of the gastric juice is the important factor in the conversion of an area of necrosis into an actual ulcer. Ulceration of the duodenum and stomach has been produced experimentally by many, and by various methods, but in each case the effects were believed to be due to the prolonged, sustained secretion of an acid gastric juice: one might even go so far as to say that consistently elevated gastric acidity is the cause of duodenal ulcer, rather than to continue saying that the cause is unknown; however, the mere fact that this situation exists, does not explain why it happens in some individuals and not in others. At present, however, all therapy in duodenal ulcers, both medical and surgical, is directed toward correcting this abnormal excess acidity. The medical treatment is aimed at eliminating any factor which might produce excess acidity, and then towards neutralizing this acidity after it has once formed. The surgical treatment at present attacks the problem from three directions:— (1) Elimination of acid-producing glands—by sub-total gastrectomy, (2) Diversion of gastric secretion from the duodenum— by gastro-enterostomy and (3) Elimination of the neurogenic factor in gastric secretion— by section of the vagus nerves.

The influence of the nervous system in the etiology of ulcer is no doubt vital, especially with respect to the derangement of the normal protective mechanism against ulcer. There does not seem to be any doubt that there is such a thing as an ulcer diathesis, and the increase of the motor and secretory activity of the stomach is characteristic of the person with duodenal ulcer. Gray⁴ states that the predisposing factor establishing the so-called "duodenal stomach" is a relative increase in vagus stimulation established by diminished sympathetic control or by increased vagus stimulation. While the initial production of duodenal ulcer may be understood, the factor or factors in the persistence of the ulcer or its tendency to recurrence have not been adequately explained by either clinical or laboratory investigators. Ochsner, Gage and Hosoi⁵ have given an excellent review on the etiology factors. They divide the causes into two groups: (1) Predisposing causes, which include tissue susceptibility and constitutional predisposition and (2) Precipitative factors, which consist of hypersecretion, hyperacidity, focal infection and gastric trauma. The normal defense mechanisms such as secretion of mucus into the stomach, the normal flow of bile and pancreatic juice into the duodenum, the normal vitality of the duodenal mucosa and the secretions of the succus entericus must play some role in the prevention of duodenal ulcers in the majority of individuals.

NORMAL AND PATHOLOGIC PHYSIOLOGY

Gastric secretion normally occurs in three distinct phases and each phase is an entity in itself—and results in the total gastric secretion which one encounters. The first phase is entirely neurogenic in nature and is stimulated by the sense organs as touch, taste, smell, and sight of food. This results in an outpouring of gastric juice rich in enzymes and acid, and is termed the psychic phase. It is this important phase of gastric secretion which is abolished after sectioning of the vagus nerves. It is certainly easy to understand that an individual with a very labile neurogenic makeup would greatly benefit from this type of a surgical procedure in order to slow up the total gastric secretion.

As soon as food enters the stomach, the gastric phase of gastric secretion ensues. The prepyloric mucosa produces a humoral agent called "gastrin" which is felt causes the stimulation of gastric secretion during this phase. This is entirely a chemical process—and is in a way affected by neurogenic pathways. Subtotal gastric resection with removal

of the prepyloric gastric mucosa will abolish this phase of gastric secretion to a great extent.

As soon as food leaves the stomach, and enters the intestine, the "intestinal phase" of gastric secretion begins. This phase is the least powerful of all—but is quite prolonged. Although secretion of gastric juice is thought to be a continuous mechanism, the amount varies in individuals—and in normal individuals the amount of secretion at night is very slight.

In addition to thinking of acidity only as related to the stomach, one must consider also the hydrogen ion concentration of the duodenal contents, as in most cases the duodenum is the site of the ulceration. Kearney⁶ has observed that in the normal individual the Ph of the duodenal contents is above 4.0, the concentration at which free acid occurs, 80% of the time. If the Ph of the duodenal contents drops below 4.0 when the stomach empties a portion of its contents into the duodenum, it is only a matter of a few minutes until the Ph returns to 4.0 or above. Such prompt regulation of the Ph of the duodenal contents requires normally active neutralizing mechanisms. As stated above, hyperacidity is considered of vital importance in the production of peptic ulcers. Thus, with the occurrence of gastric hypersecretion more gastric contents of a lower Ph must be neutralized by the duodenum if the acidity of the duodenal contents is to be maintained at a normal level; a fact which does not occur in cases of duodenal ulcer. It has been shown that under these circumstances the Ph of the duodenal contents drops much below 4.0—and remains at such a level for long periods of time. As a result of this, the duodenal mucosa is bathed in the secretion with a low Ph which predisposes to ulcer formation, and also prevents it from healing once it has resulted. Once an ulcer has formed there is a marked increase in the motor function of the stomach, and increased irritability of the prepyloric region. This can often be visualized by X-ray and fluoroscopy. Another pathological change which frequently results, is a delay in the emptying of the stomach, which may be due either to a simple spasm of the pylorus, due to irritability, or to actual fibrosis of the pylorus due to scar tissue formation during the healing period of the ulcer. Since it appears that the variations in normal physiology of the stomach can be easily altered by the hypersecretion and hyperacidity which can occur in the duodenal mucosa it seems rational to attack the problem of treatment from this viewpoint. Certainly, diverting the secretions to the jejunum by means of a gastro-jejunostomy will not answer the problem since the jejunum is also susceptible to acid secretions and prone to ulcer formations.

SURGICAL APPROACHES

Sub-total Gastric Resection:

We shall not discuss the indications for surgical therapy in duodenal ulcer since these indications are well known, but shall merely discuss the various procedures used and attempt to evaluate what is accomplished by these various procedures, and the complications which may result thereof.

Sub-total gastric resection in the therapy of duodenal ulcer aims at eliminating, to as great an extent as possible, the factor of acidity in the gastric phase of secretion. The acid-bearing glands of the stomach are eradicated—and hence the duodenal mucosa is bathed by a juice which is far less acid than previously. However, this does not eliminate the possibility of a gastro-jejunal ulcer occurring at the site of anastomosis if enough stomach has not been removed in order to remove adequately the acid-bearing glands. Since this acid-bearing portion is variable in extent in individuals, it can be seen that this danger always exists unless a total gastrectomy is performed. Beside this, the "dumping" syndrome, well known to surgeons who have done a great deal of this surgery is a complication which is both annoying and difficult to manage. The altered physiology resulting from the smaller gastric capacity may result in symptoms of such magnitude that these patients are unable to gain weight or strength and are actually no better off than before surgery.

Some of these deleterious side effects of gastric resection may be obviated by performing a Billroth I type of resection, that is anastomosis to the duodenum rather than to the jejunum. Obviously an ulcer could not form then in the jejunum; but certainly the danger of recurrent duodenal ulceration is greater, since the duodenal mucosa is then directly bathed by the remaining acid gastric juice, and certainly the fundamental susceptibility of such an individual is not altered.

We do not wish to leave the impression that gastric resection in the treatment of duodenal ulcer should be discarded, but we merely wish to point out that this operation certainly leaves much to be desired in the treatment, and that it certainly is not the complete answer.

Gastro-Enterostomy:

Although this operation has come into disfavor in recent years, since the enthusiastic acceptance of gastrectomy as the better treatment, this procedure still has its place in the treatment of duodenal ulcer. In patients who are poor surgical risks, in cases of obstruction with a relatively low acidity, in cases where the technical difficulties of gastric resection would constitute a great surgical risk, this operation

still has a place. However, we must accept the fact that the danger of gastro-jejunal ulcer, and the possibility of a resulting gastro-jejuno-colic fistula would make one hesitate before doing this procedure on a young adult who is of the typical "ulcer type." Certainly, one would not consider doing this procedure as a primary procedure in the type of cases which we now seriously consider suitable for definitive treatment.

Vagotomy:

With revival of this neglected procedure, comes the repeatedly demonstrated observation that complete section of the vagus nerves to the stomach does permit rapid healing and prolongation of remission of benign peptic ulcer, 7, 8, 9, 10, 11. It is strongly felt that this procedure best attacks the mechanism of ulcer production, namely hyperacidity and hypersecretion. Section of both vagi results in a complete loss of the psychic gastric secretion, and hence drastically reduces the acidity of the juice which bathes the duodenal mucosa. This however, does not affect the gastric or intestinal phases of gastric secretion, but it is felt that enough reduction is obtained in order that the ulcer might heal. Section of the vagi lead to less physiological changes than gastric resection and hence, if the results are comparable should be the more preferable operation. The complications of vagus section are certainly not serious, even though they are sometimes annoying. Distention is one of the most common post-operative complications, occurring in about one out of every four cases. In most cases this can be controlled by post-operative Wangensteen suction, and care in not pushing these patients too rapidly in permitting fluids and food by mouth. Over distention and dilatation of the stomach markedly delay and interfere with the readjustment of the peripheral motor mechanism and may make the post-operative care of these patients difficult. If this over distention of the stomach is prevented, a readjustment in the peripheral motor mechanism takes place, so that in a relatively short time, the motor function of the stomach resembles that seen in normal individuals. In order to minimize post-operative distention Wangensteen suction is applied to the stomach for 24-48 hours before operation, and the tube is left in place 4 or 5 days following the vagus section, great care being taken during this period to see that the stomach is completely decompressed. A marked reduction in the volume and acidity of the gastric secretion removed from the stomach after operation as compared with the amount secured in a comparable period before is a good index of the completeness of the vagotomy. After the tube is removed the patient is permitted to have 30 cubic centimeters of water per hour for the first day. At the end of the day the stomach is aspirated, and

if it is empty, 60 cubic centimeters of water per hour is permitted for the following day. If aspiration reveals the stomach to be empty, the patient is placed on a clear liquid diet for 2 or 3 days. The patient is instructed to stop eating if he feels distended. If the liquid diet leaves the stomach satisfactorily, semi-solid foods in small amounts are gradually added. Some patients have returned to a full diet within 2 or 3 weeks without ill effects, while others, more cautious, have voluntarily restricted the intake of food for 5 or 6 weeks. At times, it may be necessary to use choline in suitable doses to increase the motor activity of the vagotomized stomach, but it is not necessary to use this drug in the routine post-operative care of these patients.

Another common side-effect of this operation is diarrhea. It has been our experience that the diarrhea is usually associated with poor gastric emptying. If the gastric distention is adequately cared for in the immediate post-operative period, few patients will experience diarrhea. In those patients in whom it does occur, the diarrhea is of transitory nature and clears up spontaneously after the motor function of the stomach is restored to normal.

We wish to report a series of 12 cases of vagotomy, all performed by the trans-thoracic approach, and all done as the only procedure. Because the vagotomy was the only operative procedure performed on these patients, we were better able to evaluate the results. Ten patients had the vagotomy performed for duodenal ulcer and 2 for gastro-jejunal ulceration. None of these patients had any apparent obstruction, and so no other operative procedure was deemed necessary at the time. All of these patients were operated on because of intractable pain and inability to control them under adequate medical management. Although the follow-up period on these patients has not been of long enough duration, we have been able to reach some definite early conclusions as to the value of the procedure. We feel that the trans-thoracic approach is better than the abdominal approach in these cases, because the likelihood of missing some of the vagus fibers is minimized. All of these patients were tested for insulin response both pre- and post-operatively and from the responses obtained it is felt that in no case was the vagus incompletely severed.

CASE REPORTS

Case 1. W. H. Unit 2063: This patient had an ulcer proven by X-ray since the age of 32. When he was seen first he was 39 years old. He had had adequate medical treatment for a period of several years, but he was never completely relieved of pain for any long period of time. He had never had any obstructive symptoms, and at the time of admission

to the hospital, he had been having rather severe epigastric pain for a period of 3 weeks. X-ray at that time showed the presence of an active duodenal ulcer with no pyloric obstruction. On 2/6/46, a trans-thoracic bilateral vagotomy was performed and patient had almost immediate relief of epigastric pain. He was discharged in 12 days, and was able to assume regular diet at the end of 4 weeks. The post-operative course was complicated by mild abdominal distention which was easily controlled. X-ray 4 weeks after operation showed ulcer to be healed with no spasm of the pylorus. He was followed for a period of 6 months and had had no recurrence of pain.

Case 2. W. H. Unit 3353: This 47-year-old patient was seen in the hospital on 3/5/46, with a diagnosis of jejunal ulcer — proven by X-ray. He had had a sub-total gastrectomy performed on 11/5/43 — and for a period of 2 years had no recurrence of symptoms. When first seen on 3/5/46, he had been having epigastric pain for a period of several months, and had been under adequate medical treatment. He would have episodes of rather severe pain, lasting 3-5 days, and had become a chronic invalid. On 3/12/46, a trans-thoracic bilateral vagotomy was performed and the immediate results were excellent. He had an uneventful post-operative course, and was discharged from the hospital on the 14th day. There were no post-operative complications, and 4 weeks after operation the ulcer by X-ray was healed. He was followed for a period of 6 months and had no recurrence of symptoms, and was able to eat anything he pleased.

Case 3. W. H. Unit 4263: This 35-year-old white male had a history of duodenal ulcer for 7 years. He had had 2 mild episodes of bleeding in the past 3 years. He had been on a good medical regime for several years, but had frequent episodes of severe epigastric pain in the past 3 years, necessitating bed rest anywhere from 4 to 10 days. X-ray examinations on 3/20/46, revealed the presence of a duodenal ulcer without any evidence of pyloric obstruction. Laboratory studies revealed a high acidity, and the total 24-hour gastric secretion was high. On 3/4/46, a trans-thoracic vagotomy was performed. The post-operative course was rather smooth except for a mild pleural effusion which necessitated insertion of a needle into the pleural space on 2 occasions. He also had a mild diarrhea which cleared up in about 10 days. Follow-up studies showed the ulcer to be healed by X-ray, and 6 months following operation patient had no recurrence of pain.

Case 4. W. H. Unit 8473: This 44-year-old white female had symptoms of peptic ulcer for 6 years.

She was a very nervous, active type of woman and had been on a fairly strict diet for the past 3 years. She had lost a great deal of weight because she was afraid to eat, and existed mostly on milk and cream and soft foods. She had numerous episodes of mid-epigastric pain lasting for several days, and was beginning to develop a complex over her illness. She had been in and out of the hospital 6 times in the past 3 years with acute flare-ups of pain, and insisted that something be done at this time. X-ray examinations revealed an active duodenal ulcer with crater formation without evidence of obstruction; there was marked hyper-acidity present, and the 24-hour gastric secretion was markedly elevated. On 4/12/46, a trans-thoracic vagotomy was performed. Her post-operative course was complicated by marked abdominal distention, because patient stated she was unable to tolerate the gastric tube. On several occasions she removed the tube and refused to have it re-inserted. After distention remained marked for several days, patient accepted the gastric tube, and did well following re-insertion. She also had a rather annoying diarrhea which persisted for 3 weeks, and finally this subsided. In retrospect we attribute all of her gastro-intestinal post-operative difficulties to the fact that she did not have adequate gastric decompression following operation. She was followed for a period of 6 months, at which time X-rays revealed the ulcer to be healed and patient had gained 12 pounds, and was eating well, without recurrence of epigastric distress or pain.

Case 5. W. H. Unit 6238: This 48-year-old white male had a sub-total gastrectomy performed 4 years previously for a duodenal ulcer. He got along fairly well for about 2 years and then began to have recurrence of epigastric pain, fullness, and burning in his stomach. He was X-rayed at that time and a jejunal ulcer was found. He was put on a medical regime, but was never completely relieved over any long period of time. He was admitted to the hospital on 5/13/46, and after studies he was found to have an active stomal ulcer. He had a trans-thoracic vagotomy performed on 5/20/46, and had almost immediate relief of symptoms. His post-operative course was smooth and he was discharged 10 days after operation. Follow-up for 6 months showed the ulcer to be healed by X-ray, and no symptoms present.

The remainder of these 7 cases all had rather similar stories. Each had had ulcer symptoms from 4 to 10 years, and had proven duodenal ulcers by X-rays, without pyloric obstruction. In all cases the gastric acidity was increased as was the total gastric secretions. In all cases a trans-thoracic vagotomy was performed. In all cases the pre-operative work-up was as complete as possible, and each patient had a post-operative insulin test. Each patient was followed up

for periods varying from 6 to 8 months. There were no deaths in this series, and the post-operative com-

plications were minimal. A complete summary of these 12 cases will be seen in the following table:

Case	Diagnosis	Pre-op. free acid	Post-op. free acid	Pre-op. night sec.	Post-op. night sec.	Pre-op. insulin test	Post-op. insulin test	Complication	Follow-up	Results
1	Duodenal ulcer	40	22	1200 cc.	400 cc.	Pos.	Neg.	Mild abdominal distention	6 months ulcer healed by X-ray, symptom free	Good relief
2	Jejunal ulcer	24	12	600 cc.	240 cc.	Pos.	Neg.	None	6 months ulcer healed by X-ray, symptom free	Good
3	Duodenal ulcer	33	4	875 cc.	320 cc.	Pos.	Neg.	Mild pleural effusion	6 months ulcer healed by X-ray, symptom free	Good
4	Duodenal ulcer	66	22	1400 cc.	460 cc.	Pos.	Neg.	Abdominal distention, diarrhea, (refused suction)	6 months ulcer healed, symptom free	Good
5	Jejunal ulcer	43	12	1050 cc.	380 cc.	Pos.	Neg.	None	6 months ulcer healed, symptom free	Good
6	Duodenal ulcer	69	33	1130 cc.	520 cc.	Pos.	Neg.	Mild abdominal distention, mild diarrhea	8 months occasional mild epigastric fullness	Good
7	Duodenal ulcer	40	12	840 cc.	310 cc.	Pos.	Neg.	Minimal pleural effusion	6 months no symptoms	Good
8	Duodenal ulcer	62	18	960 cc.	520 cc.	Pos.	Neg.	None	6 months no symptoms	Good
9	Duodenal ulcer	55	26	1250 cc.	600 cc.	Pos.	Neg.	Slight abdominal distention, Mild diarrhea	6 months ulcer healed by X-ray	Good
10	Duodenal ulcer	88	31	890 cc.	420 cc.	Pos.	Neg.	None	6 months no symptoms	Good
11	Duodenal ulcer	70	20	1350 cc.	510 cc.	Pos.	Neg.	Mild distention	6 months no symptoms	Good
12	Duodenal ulcer	42	21	820 cc.	315 cc.	Pos.	Neg.	None	6 months ulcer healed by X-ray	Good

SUMMARY AND CONCLUSIONS

A group of 12 cases have been presented in which a trans-thoracic vagotomy was performed. In 10 cases a duodenal ulcer was present without any evi-

dence, either by symptoms or X-ray, of pyloric obstruction, and in 2 cases a gastro-jejunal ulcer was present following a previous sub-total gastrectomy.

In 7 of these cases there were mild post-operative complications, such as abdominal distention, diarrhea, and mild pleural effusion, but in every case these complications were of a minor nature and subsided after a short period of time. The follow-up studies on each of these patients was carried out over a short period of time, and in every case the results were excellent, and the patients had almost complete relief of symptoms. In each case the post-operative insulin test was negative, showing that the removal of the vagus innervation of the stomach was complete. In every case, there was marked reduction of free acid and night gastric secretion following operation.

These findings suggest that the operation of vagotomy to abolish the nervous phase of gastric secretion and causing the healing of benign peptic ulcers is a valuable contribution in the treatment of this disease. There is no doubt, that in order for this operation to be effective, the vagus innervation to the stomach must be completely removed, and for this reason it is felt that the trans-thoracic approach is the better one since the exposure is better and the danger of leaving intact vagal fibers is lessened. The necessity of repeated post-operative insulin tests to determine residual vagal innervation of the gastric glands is emphasized.

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cause there is a phase where the organism is getting rid of practically all of the acetone that is being formed, so that we can't rely on the four plus urine acetone as a guide to treatment, because the reaction for acetone in the urine might be strongly positive and yet the ketone bodies might be cleared up in the blood to such a degree that the resistance to insulin is greatly reduced.

I agree with Dr. Blaisdell in regard to the use of glucose. Actually, in the past twenty years, I suppose we have used it in fifty percent of the patients in the early stages; the other fifty percent we haven't. I haven't been convinced of any particular difference in the results.

Certainly, you pick a patient like that, on a low calorie diet, and having a persistent ketosis, it would be the ideal patient to give carbohydrate to.

Of course, Dr. Joslin and his group really give glucose at six hours, after the institution of treatment, providing the patient is not taking food

by mouth. Our routine is merely two hours different. We start earlier to prevent any danger of the hypoglycemia—between the four- and six-hour period—a danger which is pretty remote.

In getting the patient to take the high protein diet, I have been surprised what you can do, if you really concentrate on this aim. As I mentioned this morning, in a survey that we made of what patients ate and what they didn't eat, patients whose diets and likes and dislikes received a great deal of attention ate nearly everything provided them; these included the patients with diabetes, duodenal ulcers, and infectious hepatitis. On the other hand, patients with bronchiectasis, chronic cardiovascular disease with decompensation, ate but a mere fraction of what was given to them, emphasizing, I believe, that a great deal of attention given to whether the patients eat or not, will determine to a large extent whether or not they will eat, and in disorders in which diet is considered of secondary importance, the intake is low.

The tragedy today is not that research has failed to produce a panacea for tuberculosis but with shortage of beds and good houses we are unable to apply

fully the knowledge already at our disposal. Archd. S. Hutcheson, M. D., *NAPT Bull.*, Feb., 1946.

CLINICO-PATHOLOGICAL EXERCISE

Case presented at Maine General Hospital, Portland, Maine

Edited by JOSEPH E. PORTER, M. D.

This 76-year-old white married male was admitted to the accident ward with a chief complaint of severe pain and inability to pass his urine. Present Illness: Patient was always well until two months prior to admission, at which time he noted that while urinating he would stop and start his stream. He also noted that the stream became small and he had some burning, but no pain. He began to have a great deal of frequency and nocturia until four days prior to admission, when he had difficulty in voiding one or two drops. The day before admission he developed retention and was brought to the hospital, at which time he was catheterized and 650 cc. of urine obtained. The patient was advised to stay in the hospital, but left against advice. He returned on the following day with severe pain and a story of having been unable to pass any urine.

Past History: Usual childhood diseases; no history of rheumatic fever, diphtheria, typhoid fever, or pneumonia; no surgical operations. System review: Head: No headaches or dizziness. Eyes, ears, nose, throat negative. Neck negative. Chest: No pain, cough, edema, dyspnea, palpitation, or orthopnea. Blood pressure high. Appetite good. Bowel movements regular, no blood, pain, or gastro-intestinal disturbances. Physical examination on admission revealed a temperature of 99.6°, pulse 82, blood pressure 168/90; respirations 25. The patient was an elderly white male, in acute distress, of good color and nutrition. Head symmetrical; eyes—pupils regular, reacted to light and accommodation. Nose: No congestion, no discharge. Mouth: Lips and gums normal; tongue normal in size and shape; no masses or ulcerations. Throat clear; tonsils not enlarged. Ears: Canals clear; drums normal. Neck: No nodes, no thyroid enlargement; no tracheal deviation. Chest symmetrical; lungs clear to percussion and auscultation; no rales. Heart not enlarged to percussion; sounds of fair quality; regular rhythm; systolic murmur at apex, heard over the precordium. Abdomen: No spasm or rigidity; no organs or masses felt. No costovertebral angle tenderness. Bladder percussed 2 fingerbreadths above the symphysis. Genitalia normal. Rectal: Sphincter tone good; no masses felt. Prostate 9-10 times enlarged; symmetrical and firm. Extremities: No varicosities, no edema. Reflexes physiological.

Laboratory: Blood: Hemoglobin 85%, 12.3 mgs.; WBC, 15,100; differential: 85% neutrophils, 12% lymphocytes, 3% monocytes. Blood urea nitro-

gen 7 mg.%. Sugar 97mg.%. Acid phosphatase 4.5 units. Urine: Appearance cloudy; color yellow; reaction alkaline; Specific gravity 1.015; albumin 100 mg.; no sugar, acetone, diacetic, or bile. No casts; urate crystals; 100-150 RBC. and 50-75 WBC. per h.p.f. Urine culture showed no growth.

The patient was catheterized, with a retention catheter being put in place on admission, and 600 cc. of urine was withdrawn, and an order left to release every hour and remove 6 ounces. Two days after admission a flat plate of the abdomen and an intravenous pyelogram was done. The impression was left hydronephrosis and a defect at the base of the bladder, apparently due to an enlarged prostate. Another X-ray on the 12th hospital day, revealed moderate roughening of the lumbar spine and pelvis, with no changes in bone density. The patient's fluid intake and output on the ward was excellent, and he ran a temperature of about 99° at least once daily. He remained up and around the ward from the 8th hospital day until the day of admission. On the 25th hospital day a transurethral resection was done. After 4 gms. of tissue were removed, the operation was discontinued, due to technical difficulties with the resectoscope. It was the plan to resect more gland as soon as the resectoscope was repaired. The pathological diagnosis was benign prostatic hyperplasia and chronic prostatitis.

Following operation he began to run a spiking fever. His urinary output, which had been over 1000 cc. daily prior to operation, fell to 200 cc. on the second postoperative day. Blood urea nitrogen on the 5th postoperative day was 114 mg.%. On the 6th postoperative day the blood urea nitrogen was reported as 120 mg.%, and the CO₂ combining power 24 vol.%. Blood count on that day was as follows: Hemoglobin 83%, 12 gm.; WBC, 18,450, with a differential of 88% polys and 12% lymphocytes. He was given intravenous fluids, sodium racemic lactate, magnesium sulfate, and penicillin, but he became disoriented and almost completely unresponsive, and his fever continued to run between 100 and 102°. A note by the visiting urologist on the 33rd hospital day stated: "Patients's urea nitrogen is increasing, despite intravenous lactate and fluids." He expired on the 36th hospital day, 11 days following operation.

Output was as follows: 1st postoperative day, 440 cc.; 2nd, 200 cc.; 3rd, 430 cc.; 4th, 660 cc.; 5th, 210 cc.; 6th, 180 cc.; 7th, 300 cc.; 8th, 540 cc.; 9th, 720 cc.; 10th, 960 cc.

Intake was as follows: 1st postoperative day, 2100 cc.; 2nd, 2700 cc.; 3rd, 3150 cc.; 4th, 2050 cc.; 5th, 2200 cc.; 6th, 3200 cc.; 7th, 3000 cc.; 8th, 2000 cc.; 9th, 2500 cc.; 10th, 2500 cc.; and consisted of approximately equal amounts of normal saline and 5% dextrose in distilled water.

DISCUSSION

Dr. Roderick Huntress: The patient died. What did he die of? About all you can say is that the patient had a fever, obviously was in kidney failure, and I should think that with the information we have we would be perfectly justified in stating that the man died of kidney failure with uremia. However, uremia is a symptom of kidney failure, and what form of kidney failure did he have? I don't think there are any direct leads as to what form of kidney failure he had. We can speak of the common ones and gradually pin down what we think is the most likely to have caused his death. First, we might say that he had fever, low output of urine, kidney damage, and some acute infection from the catheter. He might have had acute nephritis—it came on rather quickly. Most of it came on about three weeks after the initial infection. We don't know anything about red urine, although he might have had bleeding after transurethral. Acidosis would go along with that, but I doubt very much if he recently had acute nephritis.

Second, 80% of stones will show in X-ray; 20% will not. It is barely possible that he had calculi, yet he could have had them. It may be responsible for hydronephrosis, although that is a very good-sized stone. He could have had a stone coming down the ureter. If he did have, and this kidney was pretty sore, the ureter could have been plugged off, elevation of blood urea and death from kidney failure would result. I don't believe that if I had a man as sick as he was I would advise cystoscopy him.

Third, bacterial endocarditis. If he had a bacterial embolus in his right kidney, probably the left kidney would not sustain life. No mention was made of rheumatic fever in his life. I do not think the man had endocarditis. It seems that if he had there would have been more in the history.

Fourth, he might have had a blood transfusion with incompatible blood, but nothing is said about that, so we will dismiss it.

Fifth, he might have had just common acute pyelonephritis. His urine had been catheterized before, and there is no question that he might have had an acute exacerbation, much edema, some shock, not a great degree; acute pyelonephritis could very well have imposed on the rest of his troubles, and he would have died of uremia. I don't believe he had much acute pyelonephritis, because the specific grav-

ity of his urine was very good. As a rule, when the specific gravity with an average intake is 15 or higher, you don't have to worry about kidney failure from pyelonephritis. He may have gone into delayed shock, but I doubt it; in that case he would have died sooner.

Sixth, he may have been given sulfa drugs. He probably had some blood following transurethral, and blood in his urine would not have been noticed. On the other hand, he should have had some pain. We don't even know that he had sulfa drugs.

Seventh, he may have had a thrombosis of both renal veins, plugging off both renal veins, but nothing was said about any thrombophlebitis, or anything of that sort, and we have no evidence that he did have this.

The last entity we will speak about is very interesting — hemolysis of the blood following transurethral resection. If you are an ardent resectionist and do a first-class job, you get right down to the surgical capsule, because if you leave any necrotic tissue to promote infection they are apt to bleed from varicose veins, and would not void as well, since the tissue is apt to grow back. If you coagulate over the veins the wall isn't firm, and bleeding is apt to start again. Fluid can go the wrong way into the venous channels, so it is very easy to work way down close to the capsule, cut into a good-sized venous channel, coagulate it, but not get it all. You may not see any bleeding, because the pressure is high enough to neutralize it; you can go ahead and resect some more, and the same events occur again and again over a period of time. You get quite a supply of distilled water into the venous channels. It is a very funny thing about getting distilled water into the venous blood. A physician put 500 cc. of distilled water into his own arm, and experienced no ill effects; he says distilled water causes no trouble. On the other hand, most people feel that distilled water causes hemolysis. What does it do? We don't know. We do know you get breaking up of cells. If you do a blood examination you will find hemoglobin free in the plasma. Inject broken-down blood cells into animals and you kill them. Most people think that the toxic part is in the cell, not in the free hemoglobin. How does it kill people? It doesn't kill them all. Some people feel that it is mechanical. You get a deposit of broken-down red (hematin) cells in the renal tubules. We do know that patients after transurethrales oftentimes will have fever, nausea, and vomiting. I think Dr. Hawkes and Dr. Parker will both admit that sometimes we ask them to see these patients. They think they may have a phlebitis, and say "Oh, that's just the fever that urological patients get." They would insist they are all old, and most all have some thrombophlebitis, and it is remarkable that they don't have more fever than they

do. I strongly suspect that those are cases of hemolysis due to distilled water entering the venous channels. Why not use saline instead? With a McCarthy resectoscope the current is dispersed by the saline. The only trouble with the Thompson resectoscope is that you can't coagulate bleeders very well. Glucose can be used, but it is sticky and messy also. If you use glucose, you can get a very much elevated blood sugar.

I haven't the slightest idea what this patient died of, except kidney failure. There is no evidence of shock, nephritis, transfusion or stone. The most logical thing is that he died of hemolysis because of introduction of distilled water through the venous supply in the prostatic bed. I suppose one might find several other things that would give kidney failure, but I think they are very remote.

Dr. Philip Thompson, Jr.: How low did his urinary output go during the last few days?

Dr. Franklin F. Ferguson: 200 to 600 cc.; 220, 660, 210, 180, 300, 540, 720, and 960 cc. On the 10th day it was 960 cc. He had 4 grams of prostate removed.

Dr. Huntress: That is not a very large amount. The physical shows a gland 9 times that size. If they only took 4 grams out of a very large gland, it would hardly approach the capsule.

Dr. Ferguson: The operative note says that 6 bites of tissue were taken when the resectoscope went out of commission. The patient was to have been resected as soon as it was repaired.

Dr. John Lincoln: What kind of anesthesia was used, and if spinal, what was the blood pressure during the brief period the patient was on the table?

Dr. Ferguson: Pontocaine and novocaine crystals. 110/70-80.

Dr. Lincoln: Was the first recorded blood pressure 110?

Dr. Ferguson: Yes.

Dr. Thompson: How much intravenous fluid each day, and how much of each type?

Dr. Ferguson: 1400 cc. by mouth and 700 parenterally; 1300, 100; 1000, 2000; 2000 by mouth for the first few days, and the last few days he received 3000, 3000, 2000, 2500, and 2500 cc. parenterally.

Dr. Thompson: I should think that he would have been waterlogged.

Dr. Huntress: It doesn't say anything about heart failure; if his kidneys were working properly, he ought to have gotten rid of it. It seems to me that this is something connected with his operation. After the operation, he may have had shock which gave him kidney damage; he was very much out of order following the operation. I wouldn't think there was evidence of shock from this paper, but mostly fever and poor kidney function.

Dr. Ferguson: There was no evidence of shock that we could find notes on. Are there any other diagnoses?

CLINICAL DIAGNOSIS

Dr. Huntress:

1. Hemolysis, intravascular.
2. Thrombosis, renal veins.
3. Shock.
4. Acute pyelonephritis.

Dr. James Parker: Why do you include shock?

Dr. Huntress: Most patients have some shock. How can you say he didn't have it?

Dr. Ferguson: There is no note to that effect.

Dr. Benjamin Zolov: Did they take an X-ray of his chest?

Dr. Ferguson: They took just one X-ray of his chest. Would any other medical man like to venture an opinion?

Dr. Zolov: I would like to offer a diagnosis of septicemia and bronchopneumonia.

Dr. Thompson: I'll vote for Number 4. My impression is that a man who had hemolysis would have had less urinary output; fever and elevated white count seemed to be a more prominent feature of his illness during the last stages than the effect of loss of renal function. That was a very prominent thing, which, I think, was aggravated by acute pyelonephritis.

Dr. Ferguson: The patient had 7 mg. blood urea preoperatively, as evidence of fairly good kidney function.

PATHOLOGIC DIAGNOSIS

1. Hemoglobinuric lower nephron nephrosis.
2. Pyelonephritis, bilateral, with multiple kidney abscesses.
3. Carbuncle of right kidney, with a small perirenal abscess at upper pole.
4. Prostatic hyperplasia, with hypertrophy and slight trabeculation of bladder.
5. Cholelithiasis; chronic cholecystitis.
6. Early bronchopneumonia; slight pulmonary congestion.
7. Generalized atherosclerosis.

Dr. Ferguson: The kidney showed a hemoglobinuric lower nephron nephrosis, which apparently had knocked out the last few remaining functioning nephrons, and in the absence of shock or transfusion reaction, I think we can attribute it to intravascular hemolysis, secondary to the use of distilled water in the bladder at the time of transurethral resection. Numerous articles have appeared recently on this subject, which was first emphasized by Dr. C. D.

Continued on page 165

THE PRESIDENT'S PAGE

I am really sorry that I was unable, in my year of office, to attend a meeting in all of the County Societies. If one is to practice medicine, along with holding Office, there is not enough time to attend all of the sessions. However, with the assistance of the President-Elect, Secretary, and Executive Secretary, together with Herbert Locke, I believe all of the County Societies have been covered. They all seem to be in a healthy condition, and are holding educational and enjoyable meetings.

I feel that there is still a lot of unfinished business. I am sure that some sort of Prepayment Insurance will be started this year. With it, we must have a Health Committee, to consult with the State Hospital Committee, and also to settle questions, and disputes about fees, salaries, etc. Our Public Relations propaganda has just started. Rural Health is a big subject. The care of the indigent must be put on a systematic basis. It is also time that we had our Constitution and By-Laws checked by our Executive Secretary, and Legislative Committee, and brought up to date.

I want to thank everyone for the fine coöperation given me during my term of office. If it were not for the officers and committee members of the Association, who give whole-heartedly of their support, the President of the Association would have a thankless and impossible job.

By the time this issue has gone to press, you will be enjoying yourself at the Annual Meeting at Poland Spring. The Scientific Committee have done a fine job and I am sure you will be enriched by the few days that you spend at the session.

You will have a fine President, for the coming year, in Forrest Ames. He has taken a lot of the load from my shoulders in the past year. He is deserving of the best in your support.

I hope that I may still be of assistance in helping straighten out some of the Medical Economic Problems, that are bound to confront the Association.

I have enjoyed my year of service as your President.

STEPHEN A. COBB, M. D.,
President, Maine Medical Association.

EDITORIAL

THE NINETY-FOURTH ANNUAL SESSION PROGRAM

The program for the Ninety-fourth Annual Session of the Maine Medical Association to be held at the Poland Spring House, Poland Spring, June 20, 21, and 22, is published elsewhere in this issue of the JOURNAL and a copy has been sent to each member of the Association. All phases of this program, which has been arranged to be of special interest to the general practitioner, have been covered in previous issues of the JOURNAL so that there remains little that one can say to emphasize its excellence. A few changes have had to be made; on Monday evening Mr. Joseph T. Lovett of Chicago, Director of the Co-operative Extension of the National Physicians' Committee, will replace Dr. Conrad and Federal Judge Edward Curran who are unable to be with us. C. Lawrence Holt, M. D., of Portland, and Milan Chapin, M. D., of Lewiston, complete the Scientific Session on Monday at 9.30 A. M. We also wish to call your attention to an error in the program for this session; H. Danforth Ross, M. D., of Sanford, will be the first speaker instead of Maurice Ross, M. D., whose name appeared in the May issue. Eugene H. Drake, M. D., of Portland will replace Wilfred J. Comeau, M. D., of Bangor, on the Tuesday morning program. We are sorry to state that Dr. Comeau is ill and is, therefore, unable to participate. On Tuesday afternoon, Paul A. Jones, M. D., of Union will replace Leo Geison, M. D., of Waterville, in the discussion of "Management and Treatment of Head Injuries."

We would like particularly to stress the importance of the meetings of the House of Delegates—the first, which will officially open the session, will be called to order by Forrest B. Ames, M. D., of Bangor, President-elect, at 3.00 P. M., Sunday, June 20th; the second, at 4.30 P. M., on Monday, June 21st. There are thirty-five delegates from our fifteen county medical societies. A special notice of these meetings has been sent to each of these delegates and we hope for a 100% attendance of 100% county society instructed delegates. Included on the order of business for these meetings will be the Prepaid Medical Care Plan as drawn up by Eugene H. Drake, M. D., of Portland, Chairman of the special committee appointed for this purpose, and members of his committee. A copy of this plan has been sent to each member of the Association. The order of business for the Sunday meeting will include the annual report of the Council by Ralph A. Goodwin, M. D., Auburn,

Chairman. Dr. Goodwin will also present the budget for 1948-1949 as recommended by the Council. Election of councilors for the First and Second Districts will take place at the second meeting of the House on Monday, as well as the appointment of a delegate to the American Medical Association for the next two years. The program for your Association for the next twelve months is outlined at these two meetings—each county society is equally represented if all delegates are present and has had ample time to instruct its delegates, so that any action taken should be representative of the entire membership. The meetings of the House of Delegates are open to all members of the Association but only delegates may vote.

Mr. Michael MacDougall, "The Card Detective," will be there to entertain you Sunday evening at 8.30 P. M.

The Scientific Session on Monday at 9.30 A. M. will be conducted by Carl E. Richards, M. D., of Alfred. The annual Medico-Legal Conference under the chairmanship of George L. Pratt, M. D., of Farmington, will be held Monday at 2.30 P. M. Theodore E. Hardy, M. D., of Waterville, will conduct a symposium on Hypertension, Tuesday morning, at 9.30 o'clock. Martyn A. Vickers, M. D., of Bangor, is chairman of the Tuesday afternoon session which will include the Presidential Address by Stephen A. Cobb, M. D., of Sanford.

Dr. Cobb will preside at the program on Tuesday evening and will present fifty-year service medals to nine members whose names appear in the program section of the JOURNAL. Major General Lewis B. Hershey of Washington, D. C., and the Rev. John Nicol Mark, Scotch Humorist, of Arlington, Massachusetts, will be guest speakers at this closing session.

Each year for some time now the Commercial Exhibit has been a little larger than the year before, and this year is no exception. Don't fail to visit these exhibits and express your appreciation to these companies who have made so much of this program possible.

A program for the ladies is also published in this issue. Be sure and call it to the attention of the lady in your house.

If you have not made your reservations, make them today.

CORRESPONDENCE

To the Editor of THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION:

Years ago I was in charge of a collection agency which handled only the accounts of physicians and dentists. During that time and through the years that followed, I attended the annual meetings of the House of Delegates of the American Medical Association because I was a close friend of Doctor Fred-eric Warnshuis, the Speaker of the House. Ever since then I have rarely missed attending some of the sessions of the House of Delegates each year, and I have always listened carefully when anything was said about any medical economic questions.

I have written several papers supporting by conviction that there is "No Need for any Change" in the way in which doctors in America have been practicing medicine and collecting fees. In other words, we do not need any new way of giving and taking medical service for our way has been and still is the world's best way. To desert the proven successful ways of the American doctors of the past means giving to America a tremendous increase in malingering and medical bills and a disastrous decrease in the quality of the doctor's services and his interest in his patients. The general health of Americans has been good and it is getting better under present arrangements. There is no Need for Change.

Today in Maine there is a determined attempt to place unnecessary middlemen — the insurance companies — between the doctor and his patients. Those behind this insurance propaganda are trying to make us believe that it is a protective measure against socialized medicine. I have been a serious student of the subject of insurance medicine and socialized medicine for many years, and I firmly believe that the danger of the Government instituting socialized medicine is over-emphasized. It is over-emphasized by the proponents of Insurance Medicine to further their own ends.

If we do not stop this prepayment insurance movement, we shall bring Socialized Medicine upon ourselves. Thinking doctors should be able to see that prepayment voluntary insurance leads to compulsory insurance or State Insurance which is State Medicine. I have the conviction that prepayment medical insurance, such as is proposed for Maine is a step *towards socialized medicine, not away from it*. When patients get out of the habit of paying the doctor directly, they will never go back to it.

Everyone is agreed that when the doctor-patient relationship is simple, direct and uncomplicated, it is at its best. It has been that in the past. It can be that in the future.

Propaganda in favor of insurance medicine has been repeatedly and continuously given to us, and we doctors who do *not* believe in it are financing this campaign!

On this Voluntary Insurance Plan now thrust upon us, I advocate an individual ballot, by mail, of all the doctors who are licensed to practice in Maine. If we had such a vote, which is a thoroughly democratic procedure, I am sure our vote would be against having any middlemen obstruct the freedom of the patients and the doctors. Why make any change in the way in which we have practiced medicine successfully and made our way of practicing the envy of doctors and patients the world over? This desire to avoid paying a doctor must be held back, not pushed.

To give part of a fee to an optical company is unethical. Why is it not just as unethical to give part of our fee to a voluntary insurance company? Patients as well as doctors realize that middleman medicine and socialized medicine is an unsatisfactory way of getting and giving medical care.

In spite of all arguments against it, the plans for insurance medicine are going ahead in Maine. Those who want it, and by this I mean especially the insurance companies, are going over our heads and selling the people the idea first. This can easily be done for the people believe that if they have insurance the insurance companies will pay all their doctor bills. Nothing could be farther from the truth, but insurance super salesmen in America can sell any kind of insurance to anybody that has money enough to pay the premium.

Now is the time when the voice of every doctor in the state should be heard as to whether or not he is in favor of so revolutionary a change in our method of practice. We can stop this insurance propaganda dead in its tracks, and I believe we should do so. The A. M. A. nor the Council of the Maine Medical Society should not and I am sure do not intend to make our decisions for us. Both organizations intend to be run from the bottom up, not the top down, but too often the individual doctors say nothing until it is too late. This is what happened in England and it can happen here.

As I have said, for many years I have been an interested listener at the meetings of the House of Delegates of the A. M. A. This January in Cleveland, at the session held primarily for general practitioners, I found that many doctors completely agree with me in my conviction that "There is No Need for Change." They, too, believe that insurance medicine must be held back, not pushed; that insurance medicine makes many more problems than it solves

and that it is a direct step towards socialized or state insurance medicine; that it gets wealthy people as well as the great middle class and the shiftless group out of the habit of paying their doctor directly. They agree with me that no middlemen of any kind should stand between us and our patients to dictate and annoy and interfere with our best efforts.

This idea of having the medical profession sell out to the commercial insurance companies cannot successfully be put over without the enthusiastic support of 60% or more of the doctors of the State of Maine. But already the public has been told repeatedly in 1948 through the newspapers that the doctors want it. This is contrary to fact, for nobody knows what the majority of the doctors want until they have voted on it and no free individual vote has been taken.

This is Maine, not Czechoslovakia, and we should have a free and independent individual vote by mail on so complete a change in our way of medical practice.

I have worked under insurance medicine and I see very little difference between working for insurance people or under the Government. Both are bad medicine and full of unfair regimentation and dictation. Both lower the grade of medical care given to the patient. Both make dissatisfied patients and doctors who are less interested in what is best for their patients.

If, this year, we let the insurance people in, within a few years all of our cases, except the indigent, will be insurance cases and our present independence and freedom will be gone. We will still have the indigent to care for as we have always cared for them. They cannot afford insurance. *Insurance companies do not take chances.* They are in this to make money and they will make plenty. They get their cut first. The total cost of sickness is not lessened, it is increased, for the middlemen must be paid. If we let the insurance companies take us over, middlemen medicine will be anathema to all of us for we will take orders from them and we will spend as much time making out forms and obeying their rulings as we spend in treating patients. Joy in our work will be gone for we will not be our own bosses.

Therefore, I advocate that part of the \$38.00 per year fee that we pay to the County and State Medical Society as dues be used to finance a secret vote, by mail, for or against this new insurance plan. Every M. D. who is licensed to practice in Maine should be asked to vote, for all will have to work under it. I believe that such a vote will stop this new insurance plan. Only those afraid of a free ballot will oppose this ballot.

Because my opinions have the support of some of the best physicians in the United States as well as the support of members of the Senate and House, I

am publishing extracts from some of the scores of endorsing letters which I have received during the past three years. Lack of space prevents me from publishing these letters in their entirety.

Thank you for sending us the splendid reprint entitled "No Need for Change" from the JOURNAL OF THE MAINE MEDICAL ASSOCIATION. This is the type of authoritative information that should be given the widest possible publicity.

May I suggest, if you have a sufficient number of copies, that you send one to each of the Editors of various State Medical Journals calling to their attention the highlights that you wish to have emphasized. The Editor for the *Pennsylvania State Journal* is Dr. Walter F. Donaldson, Jenkins Arcade, Pittsburgh. Dr. Fred Smith is Editor of "Philadelphia Medicine" the official organ of the Philadelphia Medical Society. You may wish to communicate with him also.

EDWARD L. BORTZ, M. D.,
President of the American
Medical Association.

I have read, with a great deal of interest, your reprint, "No Need for Change" and wish to congratulate you on your energy in helping to preserve the old-fashioned doctor-patient relationship. The people have long been led to expect things for nothing, but . . .

This is not true in all parts of the country; in New England, for example, and in this section where there are so many of Scandinavian descent. Your point about pre-payment plans, as well as socialized medicine, is well taken.

LOUIS A. BRUNSTING, M. D.,
Dermatologist, Mayo Clinic,
Rochester, Minnesota.

I congratulate you upon your efforts. Please keep up the good work.

H. H. SHOULDERS, M. D.,
Former President of A. M. A.,
Nashville, Tennessee.

I have received your paper and was impressed with the following paragraphs:

1. Compulsory Medicine has failed in England, Germany and Russia. (By the way the wily politician Lloyd George, was responsible for medical interference in England.)

2. Compulsory insurance always follows prepayment voluntary medicine.

3. Europe has lost its commanding position in medicine after health insurance had been established.

4. Sickness insurance is apt to destroy individual incentive.

5. The right of the doctor to do his own individual thinking is gone under medical insurance.

6. That less than 10% of the patients require more than \$100.00 a year for medical attention.

7. That 300,000 to 1,500,000 middlemen would have to be paid to operate medical insurance.

What a bust I would be if I had to do "paper work" and medicine! You should see all my abbreviated medical records which no one could decipher but me, and I sometimes have my troubles.

M. J. MORRISSEY, M. D.

(Dr. Morrissey is one of our most respected New England Dermatologists.)

I think your reprint is very timely and well done and I think expresses the views of the men here.

GEORGE LUTON, M. D.,
103 East Micheltorena,
Santa Barbara, California.

(Dr. Luton is past President of the Santa Barbara, California, County Medical Society.)

I read the article "No Need for Change" and certainly agree with you. I can also say that a majority of the Medical Profession in Arkansas are with you. So I must say I hope you will keep the Good Work going because we need some men in the United States Senate like you.

L. T. EVANS, M. D.,
President of the Arkansas
Medical Society.

I have read with interest your article on "No Need for Change" and I think it a very good one.

In taking an inventory of the achievements in medicine, I am convinced that "The net worth of unregimented medicine is beyond human appreciation." We learn this fact from the distressed people of other countries who did not realize the value of an unregimented medicine until that great asset was lost.

I. H. NEECE, M. D.,
President of Illinois State
Medical Society.

Your magazine or rather newspaper article hits things right on the head. I wish it could be put in every paper and magazine of consequence in the country. We have a *Rangeley Record* published in summer months. I wish your article could be reproduced for the people here. Shall we try it.

JOHN H. MOULTON, M. D.,
Rangeley, Maine.

(From one of the many Maine doctors who agrees with me. A. Scolten, M. D.)

It has seemed to me in the past that I have been the most outspoken man in our State Association against the Wagner-Murray-Dingell bills, and also against the proposals for pre-payment medical care as might be worked out by ours or any other association. It has been very gratifying to me on more than one occasion to have your verbal support. One of the best articles which I have read in the past regarding our subject was one which you had in the *MAINE MEDICAL JOURNAL* some years ago.

L. H. SMITH, M. D.,
Winterport, Maine.

I enjoyed reading your paper, and you have given me some good ideas. I think you struck the nail directly on the head many, many times.

R. W. FOUTS, M. D.,
Omaha, Nebraska.

(Dr. Fouts is Speaker of the House of Delegates of the American Medical Association.)

I am sending the clipping from the *Christian Science Monitor* and one of your reprints to E. Hofer & Sons, editorial writers who prepare material for 12,500 small town newspapers. There is material there which they will undoubtedly find of value to use in their articles. I believe their service will give the best coverage.

JOHN H. FITZGIBBON, M. D.,
Stevens Building,
Portland, Oregon.

(NOTE BY DR. SCOLTEN: Dr. Fitzgibbon was one of the nine members on the Board of Trustees of the A. M. A. Through his work, part of an article I had in the *Christian Science Monitor* went to 12,500 newspapers as part of an editorial. If the National Physicians' Committee and the Council on Medical Service and Public Relations were less fearful, less insurance minded and more conservative, the medical profession would not be thrown into the lions' den of insurance medicine. There has been too much fear of compulsory insurance, and as a result, this unneeded change in our time-tried way of medical practice is being advocated by too many doctors who have never worked under any insurance plans and who mistakenly believe that they offer us a Utopia.)

If each doctor would take as deep an interest in this problem as you do, the problem would quickly solve itself. I once said that each doctor should spend two hours every day with his patients educating them to the evils of socialized medicine. In one of my addresses before the House of Delegates I made the statement that regimentation in whatever

form leads to dictatorship and dictatorship leads to ultimate and complete collapse.

HERMAN L. KRETSCHMER, M. D.,
122 So. Michigan Boulevard,
Chicago, Illinois.

(Dr. Kretschmer is a former President of the American Medical Association.)

Your views on insurance jibe with my own. I do not believe that this State needs a medical insurance scheme at all. I never did. Having done all the State eye work up this way, I have made up my mind that the indigent group is very small when analyzed in terms of visits to and desire to consult a physician.

Saddling ourselves with an "idealists" scheme of utopian medical care will only encumber us all. Human nature will follow its past pattern, i.e., there will always be a very, very few deserving needy, quite a lot of social drones and social misfits economically, but a great majority of honest hard-working people who have no complaints about medical care and who pay their bills.

LLOYD BERRIE, M. D.,
Caribou, Maine.

I took your article home with me last evening and enjoyed reading it very much indeed and think it is splendid. I certainly congratulate you on this article. I heartily agree with you. If doctors would work as hard for our side as some of the subversive elements work for the other side, we could really accomplish something.

From another member of the
Board of Trustees of the American
Medical Association who does not
want his name used.

Thank you for sending me the article. I think it is splendid to have articles by different men coming out in our journals. I think it is the constant hammering of these things that gets results.

You can find a paper of mine in the MAINE MEDICAL JOURNAL of half dozen years ago, which is along the same line.

I liked your newspaper clippings. I think that that is the way to get results.

ROGER I. LEE, M. D.,
Recent President of A. M. A.,
264 Beacon Street,
Boston, Massachusetts.

I think, as you do, that the medical profession has been slow in taking leadership in these matters and I think that before long all of the doctors in this country will realize that they have been asleep at the switch. I think that your views should receive wide-

spread publicity and you may rest assured that I will do everything I can to spread them.

A. C. CIPOLLARO, M. D.,
40 East 61st Street,
New York, New York.

(Dr. Cipollaro is one of New York's leading dermatologists and was one of my professors during my four years of full time study in the Skin and Cancer Unit of the New York Post Graduate Medical School which is under the auspices of Columbia University.)

Thank you for your pamphlet. I will take it home and read it tonight. As you know, I have literally preached against State Medicine from one end of the country to the other and will continue without interruption to do so.

FRANK H. LAHEY of the
Lahey Clinic.

(NOTE BY DR. SCOLTEN: A plan for prepaid surgical insurance has been rejected by delegates to the State Medical Society meeting at Hunt Memorial.)

I appreciate very much the opportunity to read over "No Need for Change." I have very vivid recollections of my impressions of state medicine as I saw it in Europe while I was doing Post-Graduate work there.

I might also say that, from what I understand, with the State Medicine Plan that they have been following, up in the State of Washington that the doctors are getting about 25c on the dollar.

I agree, *there is no need for change.*

HAROLD N. COLE, M. D.,
1352 Hanna Building,
Euclid at 14th Street,
Cleveland, Ohio.

It is all very confused, and I think the confusion is intentional in order to mask the true state of affairs. After a lifetime in medicine, I have yet to know of a person being refused medical care because he couldn't pay.

SHERWOOD MOORE, M. D., Director,
School of Medicine,
Washington University,
St. Louis, Mo.

(NOTE BY DR. SCOLTEN: Neither have I, and I was on the National Staff of the American Red Cross. But, if we promote middleman insurance and give doctors an Army or Veterans' Bureau viewpoint and a new economic and ethical viewpoint, many will be refused. Doctors will say, "I have no authorization. Apply to the insurance company first.")

Last October, you sent me a letter, and along with it, two copies of your excellent article entitled "No Need for Change." I appreciated these very much and used them in various talks which I have given around the state, and make reference to them in several articles for newspaper publicity.

EVERETT P. COLEMAN, M. D.,
President of Illinois State
Medical Society in 1946.

We are interested in republishing your article entitled, "No Need for Change." We fully subscribe to your point of view and have published editorials in opposition to the socialization of medicine. It is unfortunate that more medical society members are not willing to get into the public print to make known their sound and valid objections to compulsory health insurance laws or programs.

CHARLES J. LEWIN,
Editor and Publisher,
Times Standard,
New Bedford, Mass.

Your point of view on this subject is a "touch-down" for the interest of the Medical Profession. I am with you for a free ballot and free medicine.

DR. HAGOPIAN,
Southwest Harbor, Me.

Recently the Fairfield County Medical Association, along with the Hartford County Medical Association of Connecticut, has rejected a prepaid insurance plan after nine years of study. This action supports my contention that prepayment insurance plans are not being universally accepted by doctors.

Medical Economics of March, page 89, says "Passing the buck to commercial insurance interests is only a few steps short of surrendering to the Government. Look what happened in England. Once the physicians there had accepted the insurance organizations, they had paved the way for limited national insurance and finally for complete socialization." British doctors began opposing insurance medicine too late. We can stop it before it gets started in Maine. Last month 89% of the doctors of England voted against the state insurance plan under which they must work, *but they voted too late*. Now they are branded as anarchists unwilling to do the will of their Government.

Under our American System, medical *doctors* should make the decisions which affect the practice of medicine in this State. We doctors know more than lay people about medical affairs, but right now there is grave danger that the control of medical affairs will be taken over by non-medical insurance-minded people. They have roped in a few leading

doctors, and they confidently expect to rope in all the rest. A representative of the insurance people told me that because I am now running for the United States Senate, I will have to change my stand on it; that they are very strong politically and have most of the doctors on their side. I suggest having a secret ballot by mail of all the doctors in Maine who must work under this new insurance plan so we can know what the wishes of the majority are. Until I know this, I shall fight against all bureaucratic control of medical affairs from the insurance companies or from the government.

As you well know, The Board of Trustees and the House of Delegates have fought against this trend of public opinion for many years. As a result, we have been accused of being reactionary and non-progressive. IF YOU COULD MAKE THE PEOPLE OF THE NATION AGREE WITH YOUR THEORIES, AS MOST PHYSICIANS WOULD LIKE TO DO, MANY OF OUR PROBLEMS WOULD BE SOLVED. However, the difficulties of putting over such information to the public are almost insurmountable. xxxx Again let me say that I admire the courageous stand you have taken and the splendid way in which you have expressed your thoughts.

*From one of the nine members
of the Board of Trustees
of the A. M. A.*

(NOTE BY DR. SCOLTEN: It is easy to put over this information to the public if we just do some real work on it. We have left it to the National Physicians' Committee which spends much of its energy raising money and does not see things through the experienced eyes of practicing physicians. The N. P. C. follows the road toward Socialized Medicine, not away from it. It is not a part of the A. M. A. I, for one, would like to know just how it spends all the money doctors, dentists and drug houses have given to it.)

Instead of giving money to the Maine State Committee for the National Physicians' Committee, we should give this problem our best personal efforts. Socialized Medicine cannot make progress if the doctors really get busy and stop it where it is now. It will not be brought up before the present Congress.

You had a good idea in thinking we might use an extract from your article. One turned up at once — the few number of expensive illnesses.

FRED W. CARR of the
Christian Science Monitor,
Boston, Massachusetts.

(NOTE BY DR. SCOLTEN: Only 10% of the people have doctor bills of over \$100 a year. If they can buy cars costing \$1,500 or \$2,000 they can also pay

doctor bills. Most of the 10% have hospital insurance, and the doctor's bill is no great burden to them. Too, as in times past, if 90% pay us, we can take care of the 10% for nothing. We must do the right thing by our patients. We doctors know that insurance people never give anything for nothing. Doctors have different ideals. We can point with pride to our past accomplishments, our past and present freedom and our record of giving better medical service than any other country on the Globe.)

BRITAIN TO IGNORE PROTEST OF DOCTORS

Health Official Asserts Socialized Set-up Will Take Effect July 5, 1947.

LONDON (AP): A British health ministry official said today the Labor Government's program of socialized medicine will go into effect July 5, in spite of overwhelming disapproval by doctors.

A doctor's strike against the plan was believed almost certain. The program enacted by Parliament last year, authorized free medical, dental and hospital service to every Briton. Part of the cost would come from pay deductions, the remainder from the British treasury.

From The Associated Press.

(NOTE BY DR. SCOLTEN: Now when their freedom is gone the British Medical Society had the doctors vote by mail on it (which is all-inclusive), and only 11% voted to work under the State Medicine set-up under which they must work. "AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE." We

should have a ballot by mail of all the practicing doctors in Maine on this insurance question now.)

The accompanying letters,—and they are only a few of the many I have received, — emphasize the fact that if individual doctors oppose insurance medicine and socialized medicine that neither one can gain a stronger foot-hold. For too long a time too many doctors have said, "It is bound to happen anyhow" This defeatist attitude must be changed to active resistance and some real work. A few earnest individuals with sound conviction and vigorous opposition can perform miracles.

America, since its inception, has stood for independence and freedom. One of our most precious freedoms is our free elections. A free individual ballot on this insurance problem, is the unalienable right of the doctors of Maine. The Maine Medical Association should not decide this question in its House of Delegates. It should be decided through a vote cast by each individual doctor according to his personal conviction in the privacy of his own home or office. It should not be denied them by the delegates to the Maine Medical Association Meeting, who cannot know the convictions of all the doctors until this vote is taken. For the right to vote without restriction, Americans have been willing to fight and die. This right should be given to the doctors of Maine. NOW, before it is too late.

ADRIAN H. SCOLTEN, M. D., Portland, Maine.

Clinico-Pathological Exercise—Continued from page 157

Creevy¹ at the University of Minnesota. In one of these articles the level of hemochromogens of the blood was checked in a variety of cases. It was found to be approximately 5 in normal postoperative patients; in patients following transurethral resection with distilled water, it was found to be about 50 on the average, and up to 600 in severe cases. The microscopic findings were the same, except that we found poorly-differentiated adenocarcinoma of the prostate.

Dr. Huntress: How much prostate tissue was left at autopsy?

Dr. Ferguson: Quite a large amount. I think it might be possible to make this diagnosis. There is nothing else which would give you quite such a sharp increase in blood urea nitrogen, because hemolysis not only interferes with kidney excretion, but causes a sudden sharp rise in the production of nitrogenous material in the blood stream at a time when one kidney is unable to excrete them.

Dr. Lincoln: If this situation does occur, I wonder what the spinal anesthesia would do?

Dr. Ferguson: One of the things suggested as treatment has been renal decapsulation. Dr. George Thorn² has emphasized that this is a self-limiting

disease, and most patients die in the first ten days. If they can be kept alive for that period, the chances are much better. If they get by the immediate anuria, the other thing to worry about is the danger of salt loss during the period of diuresis.

Dr. Charles Glassmire: Did he have any pneumonia?

Dr. Ferguson: Yes, he had a small amount of bronchopneumonia.

Dr. Glassmire: I wonder whether all the tubules were involved, or just a small portion of them, and whether or not infection had anything to do with it?

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COUNTY SOCIETIES

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Secretary, Glidden L. Brooks, M. D., Lewiston

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Secretary, C. W. Kinghorn, M. D., Kittery

COUNTY SOCIETY NOTES

Hancock

A meeting of the Hancock County Medical Society was held May 12, 1948, with thirteen members present. Also present were Norman E. Cobb, M. D., of Calais, Councilor for the Fifth District; Edward L. Herlihy, M. D., Bangor, member of the State Association's Committee on Prepaid Medical Care; L. C. Burgess, M. D.; and C. W. Capron, M. D.

The meeting was called to order by the President, M. A. Torrey, M. D. Minutes of the previous meeting were read and approved.

Dr. Herlihy spoke relative to Prepaid Medical Care, which was followed by a period of animated discussion. The resolutions, which follow, were passed unanimously by those present:

1. Resolved: That we (The Hancock County Medical Society) favor our present system of the practice of medicine as now practiced by our profession and believe it should be outlined clearly in order that laymen may understand it. We, as physicians, assume moral responsibility in our communities for the care of the sick and the prevention of disease and disability. While we are always open to suggestions for improvement of the care of the sick we believe our present set-up should be continued until some better plan is formulated. We do not believe that the plan presented by Dr. Drake's committee is better than, or forms a desirable supplement to, our practice as it exists today. We, therefore, instruct our delegate to the Maine Medical Association to vote against the plan and to oppose it or any similar plan.

2. Resolved: That the Hancock County Medical Society and its members indicate that they will continue the private practice of medicine or under the present system whereby patients are seen in a private patient-physician relationship and regardless of the adoption or enactment of any socialized medical plan do hereby resolve to continue treating patients only under the present system.

We further recommend that all physicians in the United States strongly support and publicize this or a similar resolution.

Following the adoption of the above resolutions it was moved and carried that copies of these resolutions will be sent to all members of Congress from the State of Maine.

Drs. R. V. N. Bliss, P. L. Gray, R. E. Weymouth, and R. H. Delafield were appointed by the chair to be a Public Relations Committee in regard to the above resolutions.

ROBERT H. DELAFIELD, M. D.,
Secretary.

Kennebec

The regular meeting of the Kennebec County Medical Association was held at Togus, April 15, 1948, beginning with the clinical session at 5.30 P. M., when Dr. Loughlin presented "Clinical Syndrome Vena Cava Obstruction," Dr. Spadea "Osteoid Osteoma of Astragalus," and Dr. Nelson "Aneurysm of the Circumflex Iliac." These were most interesting cases.

The usual excellent supper was served at 6.30 to 44 members. The record of the previous meeting was approved at a very brief business session. Dr. M. Tische Shelton reported for the State Association's committee on Prepaid Medical Care.

Dr. Richard Warren of Boston spoke on "Peripheral Vascular Disease." He discussed arterial occlusion, acute thrombosis as compared with embolism, treatment of popliteal aneurysm, traumatic acute arterial occlusion, chronic arterial obliteration, criteria for conservative treatment of gangrene, amputation and varicose veins.

A. H. MORRELL, M. D.,
Secretary.

Continued on page 174

“...pressure of the gravid
uterus mechanically
interferes...”

in pregnancy

“Constipation is the rule. The pressure of the gravid uterus mechanically interferes with the function of the small intestine and colon per se and also renders the act of defecation less efficient by its effect on the diaphragm, abdominal muscles and levator ani.”

—Bockus, H. L.: *Gastro-Enterology*,
Philadelphia, W. B. Saunders
Company, 1946, vol. 3, p. 999.

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Ellingwood, Louis N.,	Athens
Fuller, Edwin M., Sr.,	Bath
Gerrish, Lester P.,	Lisbon Falls
Gilbert, Percy E.,	Madison
Goodrich, Edward P.,	Winterport
Hill, Paul S., Sr.,	Saco
Hunter, Sarah L.,	Machias
Loughlin, James W.,	Newcastle
Pingree, Harold A.,	Portland
Prescott, Harry L.,	Kennebunkport
Tibbetts, George A.,	Portland
Whalen, Henry E.,	Dexter
Wilson, Clement S.,	Brunswick

COUNCILOR REPORTS

First District

To the Officers and Members of the Maine Medical Association:

I wish to submit the following report for the Cumberland and York Medical Societies:

Both societies have had the usual stated meetings. These have been well reported and printed in the JOURNAL and anyone who has taken the time to read the section on County Society Notes will have noted that all programs held were of a high caliber. Attendance at Cumberland meetings was moderate but interest and discussion were active. York had good attendance and worthwhile meetings.

W. Mayo Payson presented papers at both societies outlining his work as Executive Secretary of the State Association. His grasp of the problems was noted and members were enthusiastic concerning his activities.

Herbert E. Locke, Legal Counsel for the State Association, appeared before both societies and gave an informative talk on Malpractice.

York County voted unanimously to approve the proposed Prepaid Medical Care Plan. Cumberland County also instructed its delegates to vote for the plan at the June meeting but the vote was small and close. Most of the arguments against the plan were of a minor nature. Two points of value that seemed to be missed were: one, the plan would help to prevent socialized medicine, and two, the plan would help our public relations with the people of Maine.

Respectfully submitted,

CARL E. RICHARDS, M. D.,
Councilor, First District.

Second District

To the Officers and Members of the Maine Medical Association:

Androscoggin County Medical Society has held six meetings up to the present date (May 14th) with one scheduled for May.

At the October meeting, Mr. Herbert E. Locke spoke on "Malpractice Defense."

In December, Mr. Paul Webb addressed the Society on "Blue Cross Insurance."

Dr. Gilbert Clapperton gave a paper on "Recent Advances in Anaesthesia" at the January Meeting.

In February, Dr. Dumais discussed "Surgical Indications in Duodenal Ulcer."

A paper on "Pediatric Urology" was given by Dr. Anderson in March.

In April, Dr. Stephen A. Cobb, President of the Maine Medical Association, discussed "Recent Developments in the State Medical Association."

There has been a gradual increase in attendance at these meetings and a feeling of optimism exists to the extent that more and more interest will be taken in the County Society.

Oxford County had a very successful dinner meeting at Bethel Inn in October. A panel of Portland doctors presented papers on different types of cancer. There was a large attendance. The next meeting is in June before the annual State Association meeting.

Franklin County has held three meetings this year. One in January, another in March, a third in April and another to be held the twenty-sixth of May. This shows an increasing interest in county and state medical affairs.

The members of these counties are much interested in the current medical problems of the state and county. Discussions of the Voluntary Insurance Plan are heard from all quarters.

Respectfully submitted,

RALPH A. GOODWIN, M. D.,
Councilor, Second District.

Third District

To the Officers and Members of the Maine Medical Association:

The affairs of the two Societies in the Third District have not required special attention from its Councilor.

Meetings here have been held as usual with interesting programs and satisfactory attendance.

Respectfully submitted,

C. HAROLD JAMESON, M. D.,
Councilor, Third District.

Fourth District

To the Officers and Members of the Maine Medical Association:

The medical societies in this district during the past year have had excellent programs that have been practical and diversified.

The attendance at these meetings and the keen interest exemplified by the profession in this district will promote progress in the practice of medicine in this State.

The vital problems relative to the future of our profession have also had frank discussion at these meetings and the delegates without doubt will be instructed to act in accordance with the wishes of each county society at the June meeting of the Maine Medical Association.

Respectfully submitted,

FOSTER C. SMALL, M. D.,
Councilor, Fourth District.

Fifth District

To the Officers and Members of the Maine Medical Association:

Hancock County has had their usual enthusiastic monthly medical meetings, except during the summer months, at which everything seems to be going satisfactorily. It has been your Councilor's privilege to attend three such meetings.

On May 12th, discussion of the prepayment medical plan sponsored by the Maine Medical Association and Socialized Medicine took place. Their alternative to the above seemed to be quite adequate and these points will be brought out both at Council and Delegate meetings.

Washington County held three meetings last year. At the first, election of officers took place. This was the only meeting at which the President and Secretary were present. Both were scheduled to speak on a program in July with Dr. Comeau but neither were in attendance.

Hancock County was good enough to invite Washington County to a combined meeting at Millbridge; three were present from Washington County. Washington County's membership is adequate and good medical material is available from within the Society as well as without.

It is regrettable that this County Society exists in name only. It is my belief that this County should follow the leadership of Hancock County and reverse the scheduled meetings. With a former President of the Maine Medical Association as well as House of Delegate and Council representatives, it seems that Washington County should wake up and have a lively society to tackle not only the medical problems but also the social reforms that are ever threatening.

Respectfully submitted,

NORMAN E. COBB, M. D.,
Councilor, Fifth District.

Sixth District

To the Officers and Members of the Maine Medical Association:

In the Fall I attended the meeting of the Aroostook County Medical Society at Presque Isle. Also present at this

meeting was Mr. Herbert E. Locke, who was the speaker of the evening. At this point I would like very much to commend the work of Mr. Locke and his personal interest in the affairs of the Association, being far beyond any monetary consideration that he receives. As a member of our Association, he has done as much, if not more than any other single individual for our welfare. The meeting at Presque Isle was very well-attended and the affairs of the Association seemed to be in a very healthy condition. They have several active projects in the county, such as training one-year nurses, and the possibility of having an X-ray man serve several centers in the county. The whole atmosphere of this division is that of progress.

In August, the usual special meeting of Piscataquis County was held at Squaw Mountain Inn, and a lot of lively discussion entered into. The meeting was addressed by Stephen A. Cobb, M. D., our President. Although the membership is small they certainly more than make up for their size in spirit and coöperation.

Penobscot County continued its usual eight meetings from October through May with professional papers of marked value.

Respectfully submitted,

EDWARD L. HERLIHY, M. D.,
Councillor, Sixth District.

COMMITTEE REPORTS

STANDING COMMITTEES

Committee on Public Relations

To the Officers and Members of the Maine Medical Association:

As Chairman of the Committee on Public Relations I beg leave to submit the following report:—

Due to the inactivity of the Committee and to an apparent lack of appreciation of the value of a good Public Relations program on the part of the Association generally, little or no progress can be reported. Efforts to contact the members of the committee by letter have been fruitless. Consequently, as Chairman, I have done what I could alone. We have had a valuable medium for Public Relations in the Maine Health Council with its newspaper coverage, but no material for the Association has been forthcoming. Efforts to establish a Speakers' Bureau by the Council have met with little response. What material we have had to put out has been largely from the Hospital Association.

It would appear quite important that a good Public Relations program be developed, using these and other facilities. If this is not to be done I would urge that this committee be disposed with, as nothing is so deadly as committees which exist merely on paper, performing no function.

Respectfully submitted,

FREDERICK T. HILL, M. D.,
Chairman.

Cancer Committee

To the Officers and Members of the Maine Medical Association:

The following is a report of the Cancer Committee for the year 1947:

We now have ten approved Diagnostic Clinics which have been well attended during the past year. During this year one new Diagnostic Clinic has been approved at the Augusta General Hospital, Augusta, Maine. There are at the present time two more Diagnostic Clinics being organized that will undoubtedly be approved this year; one at the St. Andrews Hospital in Boothbay Harbor, and another at the St. Croix Clinic, Calais, Maine.

The five approved Deep X-ray Treatment Clinics in the State have shown, by yearly reports, to have nearly doubled the amount of work done during the past year.

An analysis of the annual reports from the various Diagnostic Clinics in the State show that 1,836 different patients have been seen and examined, and this number of patients has made 2,932 visits. A diagnosis of cancer was made in 326 cases, and nearly all of this number of patients have received treatment at the approved Deep X-ray Clinics. There have undoubtedly been more than this number of patients examined and treated, because at the time of this report the annual reports from two Diagnostic Clinics had not been received.

A meeting of the Cancer Committee was held in Waterville, Maine, on May 5, 1948, with only one member missing. At this meeting the work done during the past year was reviewed. The Committee recommends that funds be made available to approved Diagnostic Clinics to meet expenses for more intensive studies on the Tumor Clinic patients. If this can be arranged these Clinics would function in a much more efficient manner.

At this time I wish to thank the Committee for their coöperation during the year, and particularly pay tribute to the work being carried out in the Diagnostic and Treatment Clinics throughout the State.

Respectfully submitted,

A. H. McQUILLAN, M. D.,
Chairman.

SPECIAL COMMITTEES

Graduate Education

To the Officers and Members of the Maine Medical Association:

Following is a report of the Committee on Graduate Education of the Maine Medical Association:

This committee met on October 3, 1947, and after due consideration the following recommendations were made:

(1) Relative to THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION; it was felt that the editorship of this JOURNAL should be improved with particular respect to the quality and number of scientific articles appearing in it. It was felt that there is an apparent lack of interest and initiative in the directing forces of this JOURNAL for the past several years. It was felt that the cost of the JOURNAL to the society might be reduced by changing the format somewhat, and also using a less expensive paper. Since the JOURNAL is the official organ of the Association the material in it should be of such type and calibre that it would automatically serve as an educational medium for the members.

(2) It was recommended that a speaker's bureau* be set up for the purpose of supplying speakers for county medical society meetings. A list of speakers has been compiled and sent to the secretary of the Maine Medical Association to serve as a nucleus from which county societies will be able to call for speakers on various subjects as they need them.

(3) It was felt that the plan of having articles on the progress of medicine published in the JOURNAL as planned by this same committee in 1947 should be continued, and it was felt that the editor of the JOURNAL and his staff should contact those who are responsible for these articles each year to influence them to submit the articles at their earliest convenience.

(4) Regarding the annual meeting of the Maine Medical Association; the committee suggests that the usual morning meeting, which consists of specialty meetings, be eliminated,

and instead the major part of the meetings to be aimed at the level of the general practitioner, and subjects discussed which would interest him, from which he might obtain definite educational value.

(5) It was also felt that the calibre of the staff meetings in many of the hospitals in the State might be improved by (1) eliminating long business meetings, and (2) a more careful analysis by the staff of the statistics of the hospital.

(6) It was felt by the committee that the clinico-pathological exercises appearing in the JOURNAL were of educational value, and should be continued.

Respectfully submitted,

JOSEPH E. PORTER, M. D.,
Chairman.

* Speaker's Bureau

Bangor Area:

Dr. Martyn A. Vickers, *Allergy*.
Dr. Carl W. Ruhlin, *Orthopedics*.
Dr. Allan Woodcock, *Orthopedics*.
Dr. Joseph Memmelaar, *Genito Urinary Diseases*.
Dr. Allison Hill, *Surgery*.

Lewiston Area:

Dr. Charles W. Steele, *Cardiology*.
Dr. Milan Chapin, *Internal Medicine*.
Dr. Gilbert Clapperton, *Anesthesia*.
Dr. Donald Anderson, *Urology*.
Dr. Amy Cattley, *Obstetrics*.
Dr. Henry Thacher, *Pediatrics*.
Dr. Alcid Dunnais, *General Surgery*.
Dr. William V. Cox, *General Surgery*.

Portland Area:

Dr. Ralf Martin, *Internal Medicine*.
Dr. George F. Maltby, *Neuro Surgery*.
Dr. James M. Parker, Dr. Eugene P. McManamy, Dr. Isaac M. Webber, and Dr. Eugene E. O'Donnell, *General Surgery*.
Dr. Theodore C. Bramhall, *Gynecology*.
Dr. Donald F. Marshall, Dr. J. Foster Wellington, *Genito Urinary*.
Dr. Thomas A. Martin, Dr. Leo J. McDermott, *Orthopedics*.

Tuberculosis Committee

To the Officers and Members of the Maine Medical Association:

The Tuberculosis Committee had a meeting during the 1947 annual session of the Maine Medical Association at the Marshall House, York Harbor, Maine, with a fairly good attendance. The meeting was addressed by Dr. B. T. Darlington, Director, Division Tuberculosis Control of the Department of Health and Welfare. Excerpts from his talk follow:

"The tuberculin test among school groups gives some indication of the degree of infection in the community. The tuberculin reacting rate from 1935 to 1944 in the entire State; 16,737 high school students showed reaction rate of 8.43%. 27,692 grade school students showed a reacting rate of 5.17%."

"State Clinic offers free X-ray and chest examination service for follow-up in 25 towns and cities on an annual or semi-annual schedule. Patients are referred by nurses or physicians in the area. The clinic operates as a consultation with the results of X-ray and physical examination being referred to the physician with recommendations. Direct communication to the patient as to his current status is avoided."

"Follow-up of Industrial Surveys: Cases diagnosed by

small film X-rays as tuberculosis are re-X-rayed on 14" x 17" film if practicable. If the X-ray film shows definite tuberculosis it is treated as a newly reported case and follow-up is in a routine manner. Those suspicious cases on which a diagnosis has not been made are referred to the District Office and nurse for follow-up to determine from the private physicians whether the patient does or does not have tuberculosis."

"In general, the State of Maine has a skeleton structure of a good Tuberculosis Control Program. Better reporting by practicing physicians and an adequate number of field public health nurses would do very much to improve the program. At the present time the amount of case finding work done is definitely limited by the number of nurses to do the follow-up work."

Respectfully submitted,

FRANCIS J. WELCH, M. D.,
Chairman.

Maternal and Child Welfare

To the Officers and Members of the Maine Medical Association:

I herewith report that the Committee on Maternal and Child Welfare of the Maine Medical Association did not hold any meeting this year.

The Committee anticipated receiving for consideration the date from the Study of Child Health Service, carried on by the American Academy of Pediatrics. That data, however, has not been forthcoming and the Committee will postpone the meeting until it arrives.

Respectfully submitted,

THOMAS A. FOSTER, M. D.,
Chairman.

Conservation of Vision

To the Officers and Members of the Maine Medical Association:

A meeting of the Committee on the Conservation of Vision of the Maine Medical Association was held on Wednesday, April 21, 1948.

The first matter which was taken up was the possibility of this committee acting as an advisory council to the eye program carried on by the Department of Health and Welfare. This had been requested by those handling the eye program and it has been agreed that this would be a very good thing. We are only waiting to determine the necessary legal procedure. Each one of the committee to serve without pay of course. It was suggested that there would be at least two meetings a year and we would be subject to call on any question coming up at any time.

It was also suggested that the Committee on the Conservation of Vision each year be composed of all the ophthalmologists who have passed the ophthalmological board.

Also discussed at the meeting was the matter of the movement to replace silver nitrate with antibiotics for the prevention of ophthalmia neonatorum and a strong resolution was passed against any such movement.

There has been no agitation in this State, but the Committee is to act if in the local legislature any such move is made. As far as is known this movement has been advocated by one oculist which entails a resolution at the meeting of the A. M. A. which has never come out at committee. Apparently no thought was given to the danger of the sensitiveness of infants to penicillin.

Respectfully submitted,

HOWARD F. HILL, M. D.,
Chairman.

Medical School

To the Officers and Members of the Maine Medical Association:

Following is the report of the Commission to Study the Need for a Medical School in Maine:

This Commission was established by an Act of Legislature to include the following men: Civilians: Mr. Phillips Payson of Augusta, Mr. Henry Wheelwright of Bangor, and Mr. William Wyman of Augusta. Representatives of the University of Maine: Mr. Edward Chase of Portland, Chairman of the Board of Trustees of the University of Maine, Mr. Harland A. Ladd, Commissioner of Education, and Mr. Albert K. Gardner, Commission of Agriculture. Doctors: Stephen A. Cobb, M. D., of Sanford, Edward L. Herlihy, M. D., of Bangor, and Clyde I. Swett, M. D., of Island Falls. Dr. Herlihy was appointed Chairman of this Commission by Governor Horace Hildreth.

The Fall was devoted to educating the Commission as to registration, expense and all other items necessary in the formation of a medical school, so that the members of the Commission would have the common meeting ground of what is required of a modern medical school. The exact purpose of the Commission was to make a survey for the need of a medical school in the State of Maine. This is much more of a formidable problem. One survey was conducted by W. Mayo Payson from the professional point of view, and the other survey was conducted by the Commission itself through civilian channels, as to their medical needs, whether fully covered or not, and whether more doctors are needed. The two surveys were made so the problem could be approached from the professional side and the civilian side for a viewpoint entirely different.

Progress has been satisfactory and further reports will be given in the JOURNAL. A final report is due by December 1, so that it may be submitted to the next Legislature which convenes in Augusta, January 1, 1949.

Respectfully submitted,

EDWARD L. HERLIHY, M. D.,
Chairman.

Prepaid Medical Care Plans

To the Officers and Members of the Maine Medical Association:

The Committee recommends to the House of Delegates an insurance plan with surgical and obstetrical benefits, the insurance to be sold by insurance carriers to groups of employed workers. All insurance companies licensed to sell health insurance in Maine would be invited to participate in the plan and to submit specimen policies which the Association might approve if the policies met with the standards of the plan. All members of the Association would be asked to participate in the plan and to agree to a schedule of fees for insured persons provided their annual incomes did not exceed \$2,000 for single persons and \$3,000 for families. It would be allowable for insurance carriers to sell the insurance to any individual but the fee schedule would not apply to persons whose incomes were above the prescribed limits. Physicians would not be required to abide by the reduced schedule of fees for insured persons whose incomes were in excess of the stated limits. The plan provides for the appointment of a Health Insurance Committee to represent the Association in administration of the insurance.

The insurance would be sold to groups of employed individuals but it is expected that the plan might be subsequently

extended to cover self employed persons. It is also hoped that in the future the plan, if adopted, might include insurance against medical illness with payment for house and office visits.

Respectfully submitted,

EUGENE H. DRAKE, M. D.,
Chairman.

Veterans' Affairs Committee

To the Officers and Members of the Maine Medical Association:

Your Committee on Veterans' Affairs recommends the following:—

1. That the new contract and fee schedule for medical services, as approved and accepted by the Veterans' Administration, the Maine Medical Association, and the Associated Hospital Service of Maine, as accepted by the Council, February 15, 1948, and effective May 1, 1948, be supported not only by the House of Delegates but the Members of the Maine Medical Association at large.

2. That all Members of the Maine Medical Association be urged to participate in this program as recommended by the Council of this Association.

3. That the Council and the Delegates of this Association be cognizant of the need for the Dean's Committee, composed of the Deans of Harvard, Tufts and Boston University Medical School, and be asked to participate in the program outlined by the Veterans' Administration, this to be a Committee and not an individual, a composite whole in this program, so that the Veterans' Hospital at Togus, Maine, may be a recognized hospital and not as a glorified first-aid station. By that we mean, have facilities for training of internes and residents. Incidentally, as of this week there were about 175 beds empty with a waiting list of about 450 applicants or better.

4. That the doctors from Massachusetts, as well as those qualified in the State of Maine, be given a reasonable recompense for their services, whether it be seeing patients, giving clinics, holding seminars and the like.

5. That changes in Veterans' Regulations be published from time to time in the JOURNAL OF THE MAINE MEDICAL ASSOCIATION. We will leave out temporarily at least, the purchase of drugs, the method of commitment of those who need such, repair of prostheses, transportation of the disabled veteran to the nearest doctor, internists' fees and the veteran's choice of his own doctor of medicine and such.

We believe that the veteran should have adequate medical care by members of this Association.

We believe that licensed practitioners of medicine should participate in this program.

We believe that the doctor should be given a reasonable recompense for his services.

If you have not signed your contract with the Associated Hospital Service of Maine, we urge you to do so as soon as possible.

Respectfully submitted,

HAROLD E. PRESSEY, Bangor,
Chairman,

ELTON R. BLAISDELL, Portland,
CURRIER C. WEYMOUTH, Farmington,
FRANCIS A. WINCHENBACH, Bath,
EDWARD H. RISLEY, Waterville,
PHILIP O. GREGORY, Boothbay Harbor.



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LIPSTICK

REPORT OF THE SECRETARY-TREASURER

To the Officers and Members of the Maine Medical Association:

As your Secretary and Treasurer I am pleased to submit the following report:

There are 700 active members in good standing in the Association; 34 Honorary and six in Military Service. Forty-seven new members have been added to our roster during the past year. We have lost eighteen by death, and seven have moved out of the State.

The 1947 Clinical Session, which was sponsored by the Androscoggin County Medical Society, was held at Lewiston, Maine, November 9th and 10th. Clinics were held at the Central Maine General Hospital and St. Mary's General Hospital. Ashley Oughterson, M. D., Clinical Professor of Surgery, Yale University, was guest speaker at the dinner meeting, November 9th. His subject was "Medical Aspects of the Atomic Bomb." Dwight E. Harken, M. D., of Boston City Hospital, spoke on "Cardio-Vascular Surgery" at the dinner meeting, November 10th, at the Mansion House, Poland Spring.

The first interim meeting of the House of Delegates of the Maine Medical Association was held Sunday, November 9th, preceding the Clinical Session. Thirty of the thirty-five county delegates were present at this session and evinced much interest in the questions presented for discussion.

The Ninety-fourth annual session of the Maine Medical Association will be held at the Poland Spring House, Poland Spring, Maine, June 20, 21 and 22. The program for this meeting, which has been arranged by Francis A. Winchenbach, M. D., of Bath, Chairman of the Scientific Committee,

and members of his committee, is published elsewhere in this issue of the JOURNAL.

Fifty-Year Service Medals will be presented to the following members at 8.00 o'clock Tuesday evening, by Stephen A. Cobb, M. D., President.

Jerome P. Fickett, M. D., Walter J. Gilbert, M. D., Walter D. Hall, M. D., Herbert F. Kalloch, M. D., Walter N. Miner, M. D., Watson S. Purinton, M. D., Elbridge G. A. Stetson, M. D., Wilson H. Walters, M. D., and Frank D. Weymouth, M. D.

The Commercial Exhibit will be the largest in the history of the Association—thirty-eight companies having reserved all available space. I want to urge all those in attendance at the meeting to visit these exhibits, and so express the appreciation of the members of the Association to these companies who have contributed so generously.

As your Treasurer, I wish to report that the books of the Association and JOURNAL were closed and audited as of this date by Jordan and Jordan, Accountants and Auditors, and were found to be complete and correct in all details of record. A copy of their complete report, which will be published in the July issue of the JOURNAL, will be available at Poland Spring to any member of the Association.

I wish to express my appreciation to the County Society Officers, and to the Councilors and other Officers of the State Association, for their cooperation during the past year.

Respectfully submitted,

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer.

May 31, 1948.

HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

*County Society Notes—Continued from page 166***Piscataquis**

A meeting of the Piscataquis County Medical Association was held at George Howard's camp, Whetsone Pond, Blanchard, Maine, May 25, 1948.

It was voted that we again hold a summer meeting and that the neighboring county associations should be invited.

Forrest B. Ames, M. D., of Bangor, President-elect of the State Association, spoke regarding various things which might come before the House of Delegates at the annual meeting of the Maine Medical Association.

Our Councilor, Edward L. Herlihy, M. D., of Bangor, spoke regarding prepaid medical care.

It was voted that our Association express itself in favor

of accepting the plan as submitted by the committee of the Maine Medical Association and that we instruct our delegate to the Maine Medical Association to so vote when this is submitted to the House of Delegates.

Martyn A. Vickers, M. D., of Bangor, spoke regarding the National Physicians Committee.

N. H. NICKERSON, M. D.,
Secretary.

New Member York

Ray L. Whitney, M. D., Cape Porpoise, Maine.

NEWS AND NOTES

Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
- St. Mary's General Hospital*
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*
- Portland:** *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Joseph E. Porter, M. D.*
- Waterville:** *Sisters Hospital*
1st and 3rd Thursdays, 10.00 A. M.
Director, *B. O. Goodrich, M. D.*
- Tayer Hospital*
2nd and 4th Thursdays, 10.00 A. M.
Director, *A. H. McQuillan, M. D.*

Venereal Disease Clinics

The Department of Health and Welfare, Bureau of Health, maintains facilities for the diagnosis and treatment of venereal diseases in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford,
Lewiston, Portland, Rockland, Rumford,
Sanford, Waterville, Wilton and Winthrop.

Any physician wishing to refer an indigent person for diagnosis or treatment may obtain the name of the nearest clinic physician by contacting the Department of Health and Welfare, Bureau of Health, State House, Augusta, Maine. If no clinic facilities are available, physicians will be authorized to treat indigent patients in their offices. Authorization should be requested before treatment is started.

Bureau of Health

Services for Crippled Children Clinic Schedule, 1948

EXTENSION OF THE RHEUMATIC FEVER PROGRAM STATE SERVICES FOR CRIPPLED CHILDREN

A new children's clinic was started in Bangor. The clinic is held in the Eastern Maine General Hospital once a month. Children up to the age of twenty-one years suffering from acquired and congenital heart disease may be referred. Referrals should be sent to the Division of Services for Crippled Children, State House, Augusta. The center serves as a diagnostic center for Somerset, Piscataquis, Penobscot, Hancock, Washington and Aroostook Counties; as a treatment center for Bangor and the surrounding area.

Bangor—Eastern Maine General Hospital, 10.00 A. M.: May 28, June 25, July 23, August 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

By appointment only.

ORTHOPEDIC CLINICS

Portland — Maine General Hospital, 11.00 a. m.: Jan. 12, Feb. 9, Mar. 8, Apr. 12, May 10, June 14, July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.

Lewiston — Central Maine General Hospital, 9.00-11.00 a. m.: Jan. 23, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Rumford — Community Hospital, 1.30-3.00 p. m.: Feb. 18, Apr. 21, June 16, Aug. 18, Oct. 20, Dec. 15.

Waterville — Tayer Hospital, 1.30-3.00 p. m.: Feb. 26, Apr. 22, June 24, Aug. 26, Oct. 28, Dec. 23.

Rockland — Knox County Hospital, 1.30-3.00 p. m.: Feb. 19, May 20, Aug. 19, Nov. 10 (Wednesday).

Machias — Normal School, 1.30-3.00 p. m.: Feb. 11, Apr. 14, June 9, Aug. 11, Oct. 13, Dec. 8.

Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Jan. 20, Mar. 3, May 4, July 7, Sept. 14, Nov. 3.

Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: Mar. 2, July 6, Nov. 2.

Continued on page 180

Program

94th ANNUAL SESSION MAINE MEDICAL ASSOCIATION

JUNE 20, 21, 22, 1948 ✎ POLAND SPRING HOUSE

POLAND SPRING, MAINE

Program Arranged by the Scientific Committee



FRANCIS A. WINGHENBAGH, M. D.,

Chairman

INFORMATION

Registration:

Registration headquarters will be in the Memorial Room of the Poland Spring House. Every member and guest is requested to register and receive a badge on arrival.

Papers:

All papers read before this Association shall be its property for publication in "The Journal of the Maine Medical Association," and when read shall be deposited with the Secretary, Dr. Frederick R. Carter.

The time allowed for the presentation of papers will be strictly observed.

Visiting Delegates:

Introduction of Visiting Delegates will take place Monday afternoon, June 21st. at 2.00 o'clock.

Publicity:

Abstracts and notes to the Press are to be released only through the Committee appointed for the purpose: Frederick R. Carter, M. D., Portland, Chairman; and Stephen A. Cobb, M. D., Sanford.

Meeting Places:

Consult Bulletin Board.

SUNDAY, JUNE 20, 1948

3.00 P. M.

First Meeting of the House of Delegates

7.00 P. M.

Dinner

8.30 P. M.

Guest Speaker:

Mr. Mickey MacDougall, Nationally Famous Card Detective

MONDAY, JUNE 21, 1948

9.00 A. M.

General Assembly:

President Stephen A. Cobb, M. D.,
presiding

Announcements:

Francis A. Winchenbach, M. D., Chairman,
Scientific Committee

Frederick R. Carter, M. D., Secretary

9.30-11.30 A. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Carl E. Richards, M. D., Sanford, Chairman

1. H. Danforth Ross, M. D., Sanford
Transition—Thirty Years of Trends in Medicine
2. Theodore C. Bramhall, M. D., Portland
Office Gynecology for the General Practitioner
3. D. H. R. Lester, M. D., Bellevue Surgical Staff
Some Surgical Problems in Children

4. C. Lawrence Holt, M. D., Portland
Simple Diagnostic Office Procedures

5. Milan Chapin, M. D., Lewiston
The Newer Drugs

SPECIAL BUSINESS MEETING OF THE MEDICO-LEGAL SOCIETY
AT 10.00 A. M.

12.30 P. M.

Luncheon:

A table will be reserved for Past Presidents of the
Maine Medical Association

A table will be reserved for Ladies interested in forming
a Woman's Auxiliary to the Maine Medical Association

2.00-4.00 P. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Introduction of Visiting Delegates

MAINE MEDICO-LEGAL SOCIETY CONFERENCE

George L. Pratt, M. D., Farmington,
Chairman

2.00 P. M.

1. Presentation of case by Joseph E. Porter, M. D.,
Portland
Comments by Lawyers for both Prosecution and
Defense

3.00 P. M.

2. Address by Mr. Edward Soucy, Agent in Charge of
the New England Division of the Federal Bureau
of Investigation
Subject: Laboratory Methods of the F. B. I.

4.30 P. M.

Election of President-elect

Second Meeting of the House of Delegates

7.00 P. M.

Dinner

8.30 P. M.

Speaker:

Joseph T. Lovett, Chicago, Director of Coöperative
Extension

TUESDAY, JUNE 22, 1948

9.30-11.30 A. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Symposium on Hypertension

Theodore E. Hardy, M. D., Waterville, Chairman

Eugene H. Drake, M. D., Portland—Cardiology

Howard F. Hill, M. D., Waterville—Ophthalmology

Joseph Emmelaar, M. D., Bangor—Urology

Kenneth W. Sewall, M. D., Waterville—Obstetrics

Gilbert Clapperton, M. D., Lewiston—Anaesthesiology

George F. Maltby, M. D., Portland—Neurosurgery

12.30 P. M.

Luncheon

2.00-4.00 P. M.

SCIENTIFIC SESSION—GENERAL ASSEMBLY

Martyn A. Vickers, M. D., Bangor, Chairman

1. President's Address

Stephen A. Cobb, M. D., Sanford

2. Maine Committee on Fractures and other Trauma presents

"Management and Treatment of Head Injuries"**George F. Maltby, M. D., Portland****Howard F. Hill, M. D., Waterville****Frederick T. Hill, M. D., Waterville****Paul A. Jones, M. D., Union****Howard L. Apollonio, M. D., Rockland**

3. Vocational Rehabilitation

Harold E. Small, M. D., Augusta

7.00 P. M.

Annual Dinner

8.00 P. M.

Presentation of Fifty-Year Medals by President Stephen A. Cobb

8.30 P. M.

Speakers:

Major General Lewis B. Hershey, Washington, D. C.**John Nicol Mark, Humorist**

SPECIAL NOTICES

Fifty-Year Service Medals

Fifty-Year Service Medals will be presented to the following members Tuesday evening, June 22nd, at 8.00 o'clock.

Aroostook County Medical Society

Herbert F. Kalloch, M. D., Fort Fairfield
Bellevue Hospital Medical College, 1898

Cumberland County Medical Society

Jerome P. Fickett, M. D., Naples
Bowdoin Medical School, 1898

Elbridge G. A. Stetson, M. D., Brunswick
Bowdoin Medical School, 1898

Knox County Medical Society

Walter D. Hall, M. D., Rockland
Tufts College Medical School, 1898

Penobscot County Medical Society

Watson S. Purinton, M. D., Bangor
Dartmouth Medical School, 1898

Frank D. Weymouth, M. D., Brewer
University of Vermont College of Medicine, 1898

Somerset County Medical Society

Wilson H. Walters, M. D., Fairfield
Cleveland-Pulte Medical School, 1898

Washington County Medical Society

Walter J. Gilbert, M. D., Calais
Ohio State University School of Medicine, 1898

Walter N. Miner, M. D., Calais
University of Maryland School of Medicine, 1898

Program for the Ladies

Registration:

Registration will be in the Memorial Room of the Poland Spring House. Please register and receive a program and badge on arrival.

Program:

Evening Programs (June 20, 21 and 22).

You are invited to attend the Sunday, Monday, and Tuesday evening meetings—in fact these programs have been arranged to be of interest to you as well as to your "doctor."

(See the Official Program, which precedes the Special Notices, for complete details.)

Monday, June 21:

12.30 P. M.—Luncheon. A table will be reserved for you who are interested in forming a Woman's Auxiliary to the Maine Medical Association.

2.00 P. M.—Maine Medico-Legal Society Conference. We know, from past experience, that many of you will want to attend this conference and so have made no other plans for the afternoon.

Tuesday, June 22:

You will be entertained at the Mansion House, Tuesday afternoon. The time to be announced on the Bulletin Board.

Golf:

See notice relative to Golf Tournament.

Information:

Special notices will be posted on the Bulletin Board.

Golf Tournament

A Golf Tournament will be held with prizes for members, ladies and guests.

Scientific Exhibits

Tumor Clinic Exhibit, Maine General Hospital, Portland
Vocational Rehabilitation Exhibit, with Movies

OFFICIAL DELEGATES — 1948**County Medical Societies****FIRST DISTRICT****Cumberland County***Delegates:**(One Year)*

Oscar R. Johnson, M. D., Portland
 Maurice J. Dionne, M. D., Brunswick
 James M. Parker, M. D., Portland
 Ervin A. Center, M. D., Steep Falls

(Two Years)

Frank A. Smith, M. D., Westbrook
 Francis M. Dooley, M. D., Portland
 Franklin F. Ferguson, M. D., Portland

*Alternates:**(One Year)*

Kenneth E. Dore, M. D., Fryeburg
 Louis A. Asali, M. D., Portland
 Carl E. Dunham, M. D., Portland
 Harry E. Davis, M. D., Portland

(Two Years)

William R. McAdams, M. D., Portland
 Eugene P. McManamy, M. D., Portland

York County*Delegates:*

James H. Macdonald, M. D., Kennebunk
 Carl E. Richards, M. D., Sanford
 Charles W. Kinghorn, M. D., Kittery

Alternates:

Oscar W. Perrault, M. D., Biddeford
 William F. Mahaney, M. D., Saco
 Edward W. Holland, M. D., Sanford

SECOND DISTRICT**Androscoggin County***Delegates:*

John J. Busch, M. D., Mechanic Falls
 Bertrand A. Beliveau, M. D., Lewiston
 Paul J. Fortier, M. D., Lewiston

Franklin County*Delegate:*

George L. Pratt, M. D., Farmington

Oxford County*Delegates:**(One Year)*

Lester Adams, M. D., Greenwood Mountain

(Two Years)

Delbert M. Stewart, M. D., South Paris

*Alternates:**(One Year)*

Henry M. Howard, M. D., Rumford

(Two Years)

William T. Rowe, M. D., Rumford

THIRD DISTRICT**Knox County***Delegates:*

Paul A. Millington, M. D., Camden
 Freeman F. Brown, Sr., M. D., Rockland

Alternates:

Harry G. Tounge, M. D., Camden
 Wesley N. Wasgatt, M. D., Rockland

Lincoln-Sagadahoc Counties*Delegate:*

Francis A. Winchenbach, M. D., Bath

Alternate:

Donald B. Hawkins, M. D., South Bristol

FOURTH DISTRICT**Kennebec County***Delegates:**(One Year)*

Thomas C. McCoy, M. D., Waterville

(Two Years)

Theodore E. Hardy, M. D., Waterville
 Leon D. Herring, M. D., Winthrop
 Frank B. Bull, M. D., Gardiner
 Harold E. Small, M. D., Augusta

*Alternates:**(One Year)*

John O. Piper, M. D., Waterville
 Roland L. McKay, M. D., Augusta
 Wilson H. McWethy, M. D., Augusta
 Arch H. Morrell, M. D., Augusta

Somerset County*Delegate:*

George E. Young, M. D., Skowhegan

Alternate:

Walter S. Stinchfield, M. D., Skowhegan

Waldo County*Delegate:*

Foster C. Small, M. D., Belfast

Alternate:

John A. Caswell, M. D., Belfast

FIFTH DISTRICT**Hancock County***Delegate:*

James H. Crowe, M. D., Ellsworth

Alternate:

Raymond E. Weymouth, M. D., Bar Harbor

Washington County*Delegate:*

DaCosta F. Bennett, M. D., Lubec

Alternate:

Perley J. Mundie, M. D., Calais

SIXTH DISTRICT**Aroostook County***Delegates:*

Clyde I. Swett, M. D., Island Falls
 P. L. B. Ebbett, M. D., Houlton

Penobscot County*Delegates:*

Lawrence M. Cutler, M. D., Bangor
 George B. Weatherbee, M. D., Hampden Highlands
 Carl E. Blaisdell, M. D., Bangor
 William A. Purinton, M. D., Bangor

Piscataquis County*Delegate:*

Ralph C. Stuart, M. D., Guilford

Alternate:

Philip B. Thomas, M. D., Monson

Association Delegates to 1948 Annual Sessions**American Medical Association**

Thomas A. Foster, M. D., Portland

Connecticut State Medical Society

Franklin F. Ferguson, M. D., Portland

Massachusetts Medical Society

Theodore E. Hardy, M. D., Waterville

New Hampshire Medical Society

Paul S. Hill, Jr., M. D., Saco

Rhode Island Medical Society

William Holt, M. D., Portland

Vermont State Medical Society (1947)

Frederick R. Carter, M. D., Portland

COMMERCIAL EXHIBITS

White Laboratories, Inc., 113 No. 13th Street, Newark,
 New Jersey

Mead Johnson & Co., Evansville, Indiana

E. R. Squibb & Sons, 745 Fifth Avenue, New York City,
 New York

Tailby-Nason Company, 49 Amherst Street, Boston,
 Massachusetts

General Electric X-ray Corporation, 535 Commonwealth
 Avenue, Boston, Massachusetts

C. B. Fleet Company, 298 Cypress Street, Newton
 Centre, Massachusetts

Ciba Pharmaceutical Products, Inc., 556 Morris Avenue,
 Summit, New Jersey

DoHo Chemical Corporation, 58 Varick Street, New
 York City, New York

The Alkalol Company, Taunton, Massachusetts

The P. J. Noyes Company, Lancaster, New Hampshire
 Surgeons' & Physicians' Supply Company, 761 Boylston
 Street, Boston, Massachusetts

Lederle Laboratories, 30 Rockefeller Plaza, New York
 City, New York

Philip Morris & Co., Ltd., Inc., 119 Fifth Avenue, New
 York City, New York

Otis Clapp & Sons, Inc., 439 Boylston Street, Boston,
 Massachusetts

Davies, Rose & Co., Ltd., 22 Thayer Street, Boston,
 Massachusetts

Schering Corporation, 2 Broad Street, Bloomfield, New
 Jersey

Lanteen Medical Laboratories, Inc., 900 No. Franklin
 Street, Chicago, Illinois

The Borden Company, 350 Madison Avenue, New York
 City, New York

Eli Lilly and Company, Indianapolis, Indiana

Burroughs Wellcome & Co., 9 and 11 East Forty-First
 Street, New York City, New York

G. D. Searle & Company, Chicago, Illinois

The Coca-Cola Company, Atlanta, Georgia

Winthrop-Stearns, Inc., 170 Varick Street, New York
 City, New York

E. F. Mahady Company, 851 Boylston Street, Boston,
 Massachusetts

F. A. Davis Company, 1914-1916 Cherry Street, Phila-
 delphia, Pennsylvania

Schenley Laboratories, Inc., 350 Fifth Avenue, New
 York City, New York

U. S. Vitamin Corporation, 250 East 43rd Street, New
 York City, New York

Maine Surgical Supply Company, 10 Longfellow Square,
 Portland, Maine

George C. Frye Company, 116 Free Street, Portland,
 Maine

Thomas W. Reed Company, 91 Massachusetts Avenue,
 Boston, Massachusetts

Picker X-ray Corporation, 300 Fourth Avenue, New
 York City, New York

The National Drug Company, Philadelphia, Pennsyl-
 vania

Wyeth, Inc., 1600 Arch Street, Philadelphia, Pennsyl-
 vania

Harry E. Martin Company, 56 Exchange Street, Port-
 land, Maine

Elmer N. Blackwell, 207 Strand Building, Portland,
 Maine

Ayerst, McKenna & Harrison, Ltd., 22 E. 40th Street,
 New York City, New York

Atlantic Biochemical Laboratories, Inc., 810 Depot
 Street, Concord, New Hampshire

M & R Dietetic Laboratories, Inc., Columbus, Ohio

Convention Rates**Poland Spring House**

The Convention Rates for the 1948 Annual Session
 are as follows:

Double room with twin beds and private bath—
 \$12.00 per person per day.

Two double rooms with twin beds and connect-
 ing bath, or a double room and single room
 with connecting bath—\$12.00 per person per
 day.

Single room with private bath—\$14.00 per day.

Single or double room without bath—\$10.00 per
 person per day.

Charge for non-registered guests for meals will be as
 follows:

Breakfast	\$1.50
Luncheon	3.00
Dinner	3.00
Banquet	4.00

MAKE YOUR RESERVATIONS NOW!

News and Notes - Continued from page 174

Fort Kent — Normal School, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Jan. 21, May 5, Sept. 15.

Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: Jan. 29, Mar. 25, May 27, July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Feb. 25, June 23, Oct. 27.

By appointment only.

PEDIATRIC CLINIC SCHEDULE — 1948

Bangor — Eastern Maine General Hospital, 1.30 p. m.: Jan. 30, Feb. 27, Mar. 26, Apr. 23, May 28, June 25, July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Waterville — Thayer Hospital, 1.30 p. m.: Jan. 6, Feb. 3, Mar. 2, Apr. 6, May 4, June 1, July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.

Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: Jan. 28, Mar. 24, May 26, July 21, Sept. 22, Nov. 17.

By appointment only.

MENTAL HEALTH CLINICS

The Division of Mental Health conducts monthly clinics for children and adults in the following cities:

Portland — Health and Welfare Office, 178 Middle Street, 1st and 4th Mondays.

Lewiston — Out-Patient — Central Maine General Hospital, 3rd Thursday.

Waterville — Out-Patient — Thayer Memorial Hospital, 3rd Friday.

Bangor — Out-Patient — Eastern Maine General Hospital, 1st Wednesday afternoon. Valentine School, Union Street, 1st Thursday.

Function — Consultation, diagnosis and adjustment of habit, behavior, personality and emotional disorders and school problems in children through the age of 17.

Adults — problems in general adjustment and personality.

Types of Difficulties to be Referred:

a. Habit disorders — Feeding problems, lack of bowel control, bed wetting, thumb sucking and nail biting.

b. Conduct disorders — Aggressive behavior, temper tantrums, anger, destructiveness, lying, stealing, truancy, masturbation and sexual perversions.

c. Emotional disorders — Stuttering, tics, fears and anxieties, night terrors, compulsive behavior, hysteria.

d. Psychosomatic disorders — Psychoneuroses (based on physical inferiorities), allergic and gastric disturbances, obesity.

e. School problems — Lack of adjustment to school, placement in grade, failure in one subject only, physical handicaps, day dreaming, inattention, Retardation.

Referral blanks should be sent to the Director, Division of Mental Health, Department of Health and Welfare, Augusta. Patients will be seen by appointment only.

Referrals may be made by any of the Divisions of the Department of Health and Welfare, Department of Education, private social agencies, school superintendents, private physicians and parents.

The Division maintains a traveling clinic which visits the following places at sometime during the year: Caribou and Presque Isle, Houlton, Lincoln, Machias, Old Town, Rockland, Rumford and South Paris.

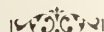


Poland Spring House, Poland Spring, Maine

OFFICIAL ROSTER



MAINE MEDICAL ASSOCIATION



MEMBERS

HONORARY MEMBERS

MEMBERS IN MILITARY SERVICE



MAY 31, 1948

ANDROSCOGGIN COUNTY

MEMBERS

Anderson, Donald L.,	54 Pine St., Lewiston
Archambault, Philip,	75 Mill St., Auburn
Beeaker, Vincent,	85 Wood St., Lewiston
Beliveau, Bertrand A.,	100 Pine St., Lewiston
Beliveau, Romeo A.,	89 Pine St., Lewiston
Bernard, Romeo A.,	144 Pine St., Lewiston
Bousquet, Jean,	91 Bartlett St., Lewiston
Brien, Maurice,	80 Pine St., Lewiston
Brooks, Glidden L.,	300 Main St., Lewiston
Buker, Edson B.,	80 Goff St., Auburn
Busch, John J.,	105 Elm St., Mechanic Falls
Call, Ernest V.,	118 Pine St., Lewiston
Caron, Frederick J.,	174 Bates St., Lewiston
Cartland, John E.,	117 Goff St., Auburn
Cattley, Amy L.,	477 Main St., Lewiston
Chapin, Milan,	300 Main St., Lewiston
Chenery, Frederick L., Jr.,	Monmouth
Chevalier, Paul R.,	240 Lisbon St., Lewiston
Clapp, Waldo A.,	215 Cottage St., Lewiston
Clapperton, Gilbert,	20 Ware St., Lewiston
Cox, William V.,	82 Gamage Ave., Auburn
Desaulniers, George E. D.,	106 Chestnut St., Lewiston
DuMais, Alcide F.,	125 College St., Lewiston
Fahey, William J.,	17 Frye St., Lewiston

Fortier, Paul J. B.,	70 Pine St., Lewiston
Frost, Robert A.,	2 Goff St., Auburn
Gauvreau, Horace L.,	82 Pine St., Lewiston
Giguere, Eustache N.,	108 Cedar St., Lewiston
Goldman, Morris E.,	487 Main St., Lewiston
Goodof, Irving I.,	392 Turner St., Auburn
Goodwin, Ralph A.,	56 Dennison St., Auburn
Gottlieb, Julius,	300 Main St., Lewiston
Grant, Alton L., Jr.,	133 Court St., Auburn
Greene, Merrill S. F.,	466 Main St., Lewiston
Gross, Leroy C.,	19 Goff St., Auburn
Haas, Rudolph,	344 Main St., Lewiston
Hanscom, Oscar E.,	Greene
Harkins, Michael J.,	437 Main St., Lewiston
Higgins, Everett C.,	149 College St., Lewiston
Hirshler, Max,	85 Pine St., Lewiston
Holin, Sabine,	29 Goff St., Auburn
James, Chakmakis,	133 College St., Lewiston
Lynn, Geraldine,	92 Pine St., Lewiston
Mandelstam, Abe W.,	17 Wakefield St., Lewiston
Martel, Dominique A.,	460 Sabattus St., Lewiston
Methot, Frank P.,	256 Lisbon St., Lewiston
Miller, Hudson R.,	11 Turner St., Auburn
O'Connell, George B.,	133 Webster St., Lewiston
Poulin, J. Emile,	198 Lisbon St., Lewiston
Pratt, Harold S.,	Livermore Falls
Rand, Carleton H.,	166 College St., Lewiston

Rand, George H.,	Livermore Falls
Randall, Ray N.,	19 Sabattus St., Lewiston
Rock, Daniel A.,	477 Maine St., Lewiston
Rowe, Gunthner A.,	Livermore Falls
Roy, Leopold O.,	54 Pine St., Lewiston
Russell, Blinn W.,	98 Pine St., Lewiston
Russell, Daniel F. D.,	Leeds
Spear, William,	Lisbon Falls
Steele, Charles W.,	1 Wakefield St., Lewiston
Sweatt, Linwood A.,	48 Drummond St., Auburn
Thacher, Henry C.,	34 Court St., Auburn
Thomas, Camp C.,	Greene
Tibbetts, Otis B.,	33 Court St., Auburn
Tousignant, Camille,	111 Pine St., Lewiston
Twaddle, Gard W.,	57 Goff St., Auburn
Viles, Wallace E.,	Turner
Webber, Wedgwood P.,	376 Main St., Lewiston
Williams, James A.,	Mechanic Falls

HONORARY MEMBERS

Hayden, Louis B.,	Livermore Falls
Peaslee, Clarence C.,	42 Goff St., Auburn
Plummer, Albert W.,	Lisbon Falls
Renwick, Ward J.,	102 Goff St., Auburn
Webber, Wallace E.,	297 Main St., Lewiston

AROOSTOOK COUNTY

MEMBERS

Albert, Armand,	Van Buren
Albert, Joseph L.,	Fort Kent
Ascher, David S.,	Patten
Berrie, Lloyd H.,	Caribou
Boone, Storer W.,	Presque Isle
Burr, Charles G.,	Houlton
Carter, Loren F.,	Presque Isle
Damon, Albert H.,	Limestone
Doble, Eugene H.,	Presque Isle
Donahue, Clement L.,	Caribou
Donahue, Gerald H.,	Presque Isle
Donovan, Joseph A.,	Houlton
Ebbett, Penry L. B.,	Houlton
Faucher, Francois J.,	Grand Isle
Gagnon, Bernard H.,	Houlton
Gormley, Eugene C.,	Houlton
Gregory, Frederick L.,	Caribou
Griffiths, Eugene B.,	Presque Isle
Grow, William B.,	Presque Isle
Harvey, Thomas G.,	Fort Fairfield
Hogan, Chester,	Houlton
Huggard, Leslie H.,	Limestone
Johnson, Gordon N.,	Houlton
Kimball, Herrick C.,	Fort Fairfield
Kalloch, Herbert F.,	Fort Fairfield
Kirk, William V.,	Eagle Lake
Labbe, Onil B.,	Van Buren
LaPorte, Paul C.,	Edmundston, N. B.
Larrabee, Fay F.,	Washburn
Levesque, Romeo,	Frenchville
Madigan, John B.,	Houlton
Merrick, John R.,	Caribou
Page, Rosario A.,	Caribou
Proctor, Ray A.,	Caribou
Reynolds, Arthur P.,	Presque Isle
Savage, Richard L.,	Fort Kent
Somerville, Robert B.,	Presque Isle
Somerville, Wallace B.,	Mars Hill
Swett, Clyde I.,	Island Falls
Toussaint, Leonid G.,	Fort Kent
Webber, John R.,	Houlton

HONORARY MEMBERS

Albert, Louis N.,	Van Buren
Sincock, Wiley E.,	Caribou

CUMBERLAND COUNTY

MEMBERS

Aranson, Albert,	Cushing V. A. Hosp., Framingham, Mass.
Applin, Hilton H.,	129 Main St., Brunswick
Asali, Louis A.,	29 Deering St., Portland
Babalian, Leon,	38 Deering St., Portland
Barker, Nathaniel B. T.,	Yarmouth
Beach, S. Judd,	704 Congress St., Portland
Beck, Henry W.,	Gray
Bergmann, Jerome W.,	131 State St., Portland
Bickmore, Harold V.,	723 Congress St., Portland
Bischoffberger, John M.,	Naples
Bishop, Lloyd W.,	188 State St., Portland
Blaisdell, Elton R.,	12 Deering St., Portland
Bramhall, Theodore C.,	704 Congress St., Portland
Branson, Sidney R.,	So. Windham
Broggi, Frank S.,	18 Neal St., Portland
Brown, Luther A.,	13 Deering St., Portland
Brown, Stephen S.,	22 Arsenal St., Portland
Burbank, Bernard H.,	275 Cottage Rd., So. Portland
Burns, Robert,	826 Main St., Westbrook
Burrage, Thomas J.,	142 High St., Portland
Burrage, William C.,	57 Deering St., Portland
Cappello, Joseph,	144 Spring St., Portland
Carmichael, Frank E.,	72 Deering St., Portland
Casey, William L.,	131 State St., Portland
Center, Ervin A.,	Steep Falls
Christensen, Harry E.,	672 Ocean Ave., Portland
Clarke, Chester L.,	10 Congress Square, Portland
Clough, Dexter J.,	41 Carleton St., Portland
Conneen, Lawrence W.,	131 State St., Portland
Cragin, Charles L.,	831 Congress St., Portland
Cummings, George O.,	47 Deering St., Portland
Curtis, Harry L.,	142 High St., Portland
Daniels, Donald H.,	73 Deering St., Portland
Darche, Albert,	782 Main St., Westbrook
Davidson, David,	45 Deering St., Portland
Davidson, Gisela K.,	45 Deering St., Portland
Davis, Harry E.,	169 State St., Portland
Davis, Paul V.,	Bridgton
Derry, George H., Jr.,	690 Congress St., Portland
Dionne, Maurice J.,	36 Cumberland St., Brunswick
Dooley, Francis M.,	53 Deering St., Portland
Dore, Kenneth E.,	Fryeburg
Dorsey, Frank D.,	52 Deering St., Portland
Douphinett, Otis J.,	763 Congress St., Portland
Drake, Eugene H.,	58 Deering St., Portland
Drummond, Joseph B.,	10 Ship Channel Rd., So. Portland
Dunham, Carl E.,	201 State St., Portland
Dyer, Henry L.,	Gorham, N. H.
Dyhrberg, Norman,	331 Main St., Cumberland Mills
Everett, Harold J.,	308 Danforth St., Portland
Fagone, Francis A.,	312 Congress St., Portland
Ferguson, Franklin A.,	9 Deering St., Portland
Ferguson, Franklin F.,	22 Arsenal St., Portland
Fickett, Jerome P.,	Naples
Files, Ernest W.,	201 State St., Portland
Finks, Henry B.,	73 Deering St., Portland
Fisher, Stanwood E.,	388 Spring St., Portland
Foster, Albert D.,	Bay Shore Drive, Falmouth Foreside
Foster, Thomas A.,	131 State St., Portland
Fox, S. Frank,	173 State St., Portland
Freeman, William E.,	Yarmouth
Geer, Charles R.,	690 Congress St., Portland
Geer, George I., Jr.,	690 Congress St., Portland
Gehring, Edwin W.,	Columbia Hotel, Portland
Getchell, Ralph A.,	690 Congress St., Portland
Geyerhahn, George,	47 Deering St., Portland
Glassmire, Charles R.,	45 Deering St., Portland
Goduti, Richard J.,	704 Congress St., Portland
Good, Philip G.,	38 Deering St., Portland
Gordon, Charles H.,	46 Deering St., Portland
Gould, Arthur L.,	Freeport
Greco, Edward A.,	12 Pine St., Portland
Hall, Earl S.,	696 Congress St., Portland
Ham, Joseph G.,	690 Congress St., Portland
Hamel, John R.,	50 Deering St., Portland
Hanlon, Francis W.,	46 Deering St., Portland
Hanson, Henry W., Jr.,	Cumberland Center

Haskell, Alfred W., 142 High St., Portland
 Hawkes, Richard S., 47 Deering St., Portland
 Heifetz, Ralph, 173 State St., Portland
 Hills, Louis L., 816 Main St., Westbrook
 Holt, C. Lawrence, 29 Deering St., Portland
 Holt, William, 14 Deering St., Portland
 Huntress, Roderick L., 10 Congress Square, Portland
 Ives, Howard R., 31 Deering St., Portland
 Jackson, Calvin S., State Road, Falmouth Foreside
 Jamieson, James G. S., 82 High St., Portland
 Johnson, Albert C., 45 Deering St., Portland
 Johnson, Henry P., 32 Deering St., Portland
 Johnson, Oscar R., 18 Deering St., Portland
 Konecki, John T., 821 Washington Ave., Portland
 Kupelian, Nessib S., Pownal State School, Pownal
 Lamb, Henry W., 131 State St., Portland
 Lappin, John J., 171 State St., Portland
 Laughlin, K. Alexander, 201 State St., Portland
 Leighton, Adam P., 192 State St., Portland
 Leighton, Wilbur E., 192 State St., Portland
 Loewenstein, George, Chebeague Island
 Logan, G. E. C., 144 State St., Portland
 Lombard, Reginald T., 793 Main St., So. Portland
 Lorimer, Robert V., 201 State St., Portland
 Lothrop, Eaton S., 690 Congress St., Portland
 Love, Robert B., Gorham
 Lovely, David K., 73 Deering St., Portland
 Macdonald, H. Eugene, 690 Congress St., Portland
 Maltby, George F., 29 Deering St., Portland
 Marshall, Donald P., 142 High St., Portland
 Marston, Paul C., Kezar Falls
 Martin, Ralf S., 58 Deering St., Portland
 Martin, Thomas A., 131 State St., Portland
 McAdams, William R., 723 Congress St., Portland
 McCann, Eugene C., 704 Congress St., Portland
 McCrum, Philip H., 188 State St., Portland
 McDermott, Leo J., 151 Vaughan St., Portland
 McGregor, Eugene B., 22 Arsenal St., Portland
 McIntire, Barron, Yarmouth
 McLean, E. Allan, 29 Deering St., Portland
 McManamy, Eugene P., 39 Deering St., Portland
 Melnick, Jacob, 333 Congress St., Portland
 Metcalf, John T., Calais
 Miller, Thor, 752 Main St., Westbrook
 Mills, Nathaniel, Pownal State School, Pownal
 Monkhouse, William A., 131 State St., Portland
 Moore, Roland B., 201 State St., Portland
 Morrison, Alvin A., 57 Deering St., Portland
 Morrison, James B., 582 Main St., Westbrook
 Moulton, Albert W., Sr., 180 State St., Portland
 Moulton, Albert W., Jr., 180 State St., Portland
 O'Donnell, Eugene E., 32 Deering St., Portland
 Ormandy, Laszlo, 22 Deering St., Portland
 Ottum, Alvin E., 31 Deering St., Portland
 Parker, James M., 31 Deering St., Portland
 Patterson, James, 614 Highland Ave., So. Portland
 Peaslee, C. Capen, Jr., 339 Woodford St., Portland
 Penta, Walter E., 316 Woodford St., Portland
 Peters, Clinton N., 10 Congress Square, Portland
 Polisner, Saul R., 188 State St., Portland
 Porter, Joseph E., 22 Arsenal St., Portland
 Richardson, Clyde E., Brunswick
 Ridlon, Joseph R., 20 South St., Gorham
 Ridlon, Magnus G., Kezar Falls
 Robinson, Carl M., 31 Deering St., Portland
 Rowe, Daniel M., 757 Congress St., Portland
 Santoro, Domenico A., 576 Congress St., Portland
 Sawyer, Samuel G., Cornish
 Schwartz, Carol, 38 Deering St., Portland
 Scolten, Adrian H., 32 Deering St., Portland
 Shanahan, William H., 306 Congress St., Portland
 Smith, Frank A., 343 Main St., Westbrook
 Smith, Kenneth E., 73 Deering St., Portland
 Sowles, Horace, 131 State St., Portland
 Spencer, Jack, 31 Deering St., Portland
 Stetson, Elbridge G. A., Brunswick
 Stevens, Theodore M., 32 Deering St., Portland
 Stuart, Albert F., 23 Noyes St., Portland
 Tabachnick, Henry M., 110 Park Ave., Portland
 Thaxter, Langdon T., 22 Arsenal St., Portland

Thompson, Philip P., Sr., 704 Congress St., Portland
 Thompson, Philip P., Jr., 704 Congress St., Portland
 Tobie, Walter E., 3 Deering St., Portland
 Tougas, Raymond, Brunswick
 Ulpis, Reynold G. E., 6119 N. Wisconsin Ave., Manwatosia, Wisconsin
 Upham, Roscoe C., 15 Crescent St., Biddeford
 Ventimiglia, William A., 474 Congress St., Portland
 Ward, John V., 131 State St., Portland
 Webb, Harold R., Brunswick
 Webber, Isaac M., 29 Deering St., Portland
 Webber, M. Carroll, 735 Stevens Ave., Portland
 Webster, Fred P., 101 Vaughan St., Portland
 Weeks, DeForest, 158 Pleasant Ave., Portland
 Welch, Francis J., 44 Deering St., Portland
 Wellington, J. Foster, 655 Congress St., Portland
 Wescott, Clement P., Windham Hill
 Whitney, Harlan R., 655 Congress St., Portland
 Whittier, Alice A. S., 143 Neal St., Portland
 Wight, Donald G., 30 Mitchell Rd., So. Portland
 Williams, Ralph E., Freeport
 Witte, Max E., Jr., 29 Deering St., Portland
 Woodman, Arthur B., Falmouth Foreside
 Zolov, Benjamin, 296 Congress St., Portland

HONORARY MEMBERS

Bradford, William H., 133 Coyle St., Portland
 Brock, Henry H., Alfred
 Emery, Harry W., 721 Stevens Ave., Portland
 Howard, Harvey, Freeport
 Pepper, John L., 960 Sawyer St., So. Portland
 Robinson, Edward F., Falmouth
 Tetreau, Thomas, 44 Monument Square, Portland
 Wheat, Frederick E., 773 Main St., Westbrook

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Fogg, C. Eugene, Walter Reed Hospital, Washington, D. C.
 Thompson, Milton S., Brooke Gen. Hospital, Fort Sam Houston, Texas

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 Brown, Irving E., Jr., Rangeley
 Chase, Philip, Strong
 Colley, Maynard B., Wilton
 Floyd, Albion E., New Sharon
 Floyd, Paul E., Farmington
 Kyes, Preston, North Jay
 LaTourette, Kenneth A., Farmington
 Moulton, John H., Rangeley
 Pratt, George L., Farmington
 Reed, James W., Farmington
 Thompson, Cecil F., Phillips
 Weymouth, Currier C., Farmington
 Zikel, Herbert M., Wilton

HONORARY MEMBER

White, Verdeil O., (summer) East Dixfield
 (winter) 24 Howard St., Springvale

HANCOCK COUNTY

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 Bliss, Raymond V. N., Blue Hill
 Cameron, Dwight, Northeast Harbor
 Clarke, Raymond W., Ellsworth
 Coffin, Ernest L., Northeast Harbor
 Coffin, Silas A., Bar Harbor
 Crowe, James H., Ellsworth
 Delafield, Robert H., Ellsworth
 Gray, Philip L., So. Brooksville
 Hagopian, Leon G., Southwest Harbor
 Knickerbocker, Charles H., Bar Harbor
 Knowlton, Charles C., Ellsworth
 Kopfmann, Harry, Deer Isle
 Larrabee, Charles F., Bar Harbor

Morrison, Charles C., Jr.,
O'Meara, E. S.,
Parcher, George,
Sumner, Charles M.,
Thegan, Edward,
Torrey, Marcus A.,
Trowbridge, Mason,
Weymouth, Raymond E.,
Wilbur, Herbert T., Jr.,

Bar Harbor
Ellsworth
Ellsworth
West Sullivan
Bucksport
Ellsworth
Bar Harbor
Southwest Harbor

Murphy, Norman B.,
Nelson, John,
Newcomb, Charles H.,
Newman, Benjamin,

31 Western Ave., Augusta
Veterans' Administration, Togus
Clinton

1204 Westwood Ave., Charleston, West Virginia

O'Connor, William J.,
Odiorne, Joseph E.,
Parizo, Harry L.,
Piper, John O.,
Pomerleau, Ovide F.,
Pomerleau, Rodolphe J. F.,
Popplestone, Charles B.,
Poulin, James E.,
Priest, Maurice A.,
Provost, Helen C.,
Provost, Pierre E.,
Reynolds, John F.,
Reynolds, Ralph L.,
Risley, Edward H.,
Sanders, Stephen W.,
Schmidt, Lorrimer M.,
Sewall, Kenneth W.,
Shelton, M. Tieche,
Shippee, James N.,
Simpson, Margaret,
Sleeper, Francis H.,
Small, Harold E.,
Sommerfeld, Kurt A.,
Staciva, Stanley J.,
Stubbs, Richard H.,
Towne, Charles E.,
Towne, John G.,
Trask, Burton W.,
Tyson, Forrest C.,
Valentine, John B.,
Williams, Edmund P.,
Wilson, Robert W.,
Young, William J.,

341 Water St., Augusta
Coopers Mills
2 Silver St., Waterville
177 Main St., Waterville
Professional Bldg., Waterville
Professional Bldg., Waterville
Central Maine San., Fairfield
177 Main St., Waterville
State House, Augusta
48 Green St., Augusta
48 Green St., Augusta
101 Main St., Waterville
101 Main St., Waterville
27 College Ave., Waterville
Winthrop
Veterans' Administration, Togus
173 Main St., Waterville
61 Winthrop St., Augusta
122 Main St., Winthrop
State House, Augusta
State Hospital, Augusta
31 Grove St., Augusta
6 Main Ave., Gardiner
99 Sewall St., Augusta
133 State St., Augusta
50 Main St., Waterville
135 Main St., Waterville
218 Penobscot St., Rumford
R. F. D. 5, Augusta
25 Patterson St., Augusta
Oakland
Veterans' Administration, Togus
92 Wood St., Lewiston

HONORARY MEMBERS

Holt, Hiram A.,
Little, Clarence C.,

Winter Harbor
Bar Harbor

KENNEBEC COUNTY

MEMBERS

Bauman, Clair S.,
Bisson, Napoleon,
Bourassa, Harvey J.,
Brann, Henry A.,
Breard, Joseph A.,
Bristol, Leverett D.,
Bull, Frank B.,
Carter, Frederick R.,
Cates, Samuel C.,
Chasse, Richard L.,
Cook, Aaron,
Coombs, George A.,
Cyr, Gerald A.,
Dachslager, Philip,
Dore, Clarence E.,
Dunn, Robert H.,
Elkins, Harry,
Emanuel, Meyer,
Farrell, Chalmers G.,
Fay, Thomas F.,
Fisher, Dean,
Fisher, Samson,
Flanders, Merton N.,
Friedlander, Ernest O.,
Giddings, Paul D.,
Giesen, Joseph H.,
Gingras, Adolphe J.,
Gingras, Napoleon J.,
Goodrich, Blynn O.,
Gousse, William L.,
Guite, L. Armand,
Hardy, Theodore E., Jr.,
Herring, Leon D.,
Hill, Frederick T.,
Hill, Howard F.,
Hirschberger, Celia,
Hurd, Allan C.,
Irgens, E. R.,
Jackson, Elmer H.,
Jump, Clarence E.,
Kagan, Samuel H.,
Kenny, Clarence J.,
Kirkham, Dunham,
Langer, Ella,
Lepore, Anthony,
Libby, Ara B.,
Libby, Harold E.,
Lubell, Moses F.,
Marquardt, Matthias,
Mazzola, Stephen,
McKay, Roland L.,
McLaughlin, Clarence R.,
McLaughlin, Ivan E.,
McQuillan, A. H.,
McWethy, Wilson H.,
Merrill, Percy S.,
Metzgar, John G.,
Michaud, Joseph H. C.,
Milliken, Howard H.,
Mitchell, Roscoe L.,
Moore, Arnold W.,
Morrell, Arch H.,

177 Main St., Waterville
29 Common St., Waterville
50 Main St., Waterville
318 Water St., Augusta
15 Summer St., Waterville
37 Capitol St., Augusta
72 Church St., Gardiner
43 Sylva Rd., So. Portland
East Vassalboro
173 Main St., Waterville
44 Main St., Waterville
283 Water St., Augusta
50 Main St., Waterville
269½ Water St., Augusta
Waterville
Veterans' Administration, Togus
State Hospital, Augusta
Veterans' Administration, Togus
2 Church St., Gardiner
286 Water St., Augusta
State House, Augusta
Oakland
177 Main St., Waterville
Veterans' Administration, Togus
25 Gage St., Augusta
Waterville
99 Water St., Augusta
105 Water St., Augusta
165 Main St., Waterville
Fairfield
27 Main St., Waterville
65 Temple St., Waterville
Winthrop
177 Main St., Waterville
177 Main St., Waterville
44 Main St., Waterville
72 Church St., Gardiner
Wills Hospital, Philadelphia 30, Pa.
304 Water St., Augusta
Veterans' Administration, Tuscaloosa, Alabama
283 Water St., Augusta
Veterans' Administration, Wadsworth, Kansas
Veterans' Administration, Togus
State House, Augusta
72 Church St., Gardiner
295 Water St., Gardiner
Water St., Gardiner
50 Roosevelt Ave., Waterville
State Hospital, Augusta
8122-17th Ave., Brooklyn 14, N. Y.
284 Water St., Augusta
345 Water St., Gardiner
345 Water St., Gardiner
177 Main St., Waterville
31 Western Ave., Augusta
82 Elm St., Waterville
175 Water St., Augusta
76 Main St., Waterville
105 Second St., Hallowell
Hallowell
State Hospital, Augusta
State House, Augusta

HONORARY MEMBERS

Campbell, George R.,
Cobb, William O.,
Turner, Oliver W.,

175 Water St., Augusta
47 Brunswick Ave., Gardiner
Boothbay Harbor

KNOX COUNTY

MEMBERS

Allen, Robert L.,
Apollonio, Howard L.,
Brown, Freeman F.,
Brown, Freeman F., Jr.,
Campbell, Fred G.,
Dennison, Frederick C.,
Earle, Ralph P.,
Frohock, Horatio W.,
Green, Archibald F.,
Hall, Walter D.,
Jameson, C. Harold,
Jones, Paul A.,
Kibbe, F. W.,
Lawry, Oram R., Jr.,
Mann, David V.,
Miller, Herbert L.,
Miller, John F.,
Millington, Paul A.,
North, Charles D.,
Platt, Anna,
Shields, Victor H.,
Soule, Gilmore W.,
Tounge, Harry G.,
Wasgatt, Wesley N.,
Weisman, Herman J.,

37 Spring St., Rockland
7 Talbot Ave., Rockland
5 Beech St., Rockland
15 Maple St., Rockland
Warren
Thomaston
Vinalhaven
10 Summer St., Rockland
60 Elm St., Camden
407 Main St., Rockland
463 Main St., Rockland
Union
37 Spring St., Rockland
27 Oak St., Rockland
74 Elm St., Camden
Camden
81 Park St., Rockland
Camden
38 Union St., Rockland
Friendship
North Haven
463 Main St., Rockland
Camden
41 Talbot Ave., Rockland
76 Limerock St., Rockland

HONORARY MEMBERS

Coombs, George H.,
Tweedie, Hedley V.,

Waldoboro
76 No. Main St., Rockland

LINCOLN-SAGADAHOC COUNTY

MEMBERS

Barrows, Harris C.,

5 Oak St., Boothbay Harbor

Belknap, Robert W., Damariscotta
 Day, DeForest S., Wiscasset
 Dougherty, John, 112 Front St., Bath
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PRESIDENTIAL ADDRESS*

The Old and the New in Medicine

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Primitive man in his struggle for existence had one great emotion — Fear. Sickness, pain, and his struggle against the elements, made him fear a perverse god — translated as the devil. If he conquered these enemies to his well-being he soon began to imagine there must be a good Divinity watching over him — his God. So from his fear and ignorance began superstition. Up to the time of the discovery of Pathogenic organisms by Louis Pasteur in the period from 1854 to 1865, Medicine and its cures were founded on Superstition and the Supernatural. From this belief sprang the various religious cults of the world, Christian, Buddhist, Mohammedan, and Jewish. Even unto today, sickness is still considered the curse of the devil.

So the progress of medicine can be divided into two eras. Before 1865, the Superstitious era, and since Louis Pasteur's great work, the scientific era. As you see this makes modern medicine about 80 years old. It is only about two hundred years since the abolishment of witchcraft in our own country. Witches were supposed to have power given to them by the devil and were thought not only to cause sickness, but were able to cure it as well. We are set in a world of mysteries. We know not from whence we came nor whither we go. We find ourselves in a

world of sickness, with only death ahead of us, therefore, we believe that which is indicated by our fears, and hopes. We fear death, therefore we believe in life beyond the grave. We are sick, but hope and believe we will get well. We hope for riches, comforts and pleasures of all sorts, and life beyond. We constantly see and hear things not as they really are, but as we want them to be. Man really lives for just three things: riches, health, and heaven when he dies.

The mysterious appeals to the doctor and public even today. Physio-therapy, Chemo-therapy, Osteopathy, and various cults hold the spotlight in treatment today largely due to their mysteriousness. The original doctor was a magician. He mixed up various concoctions, and gave them to the sick. Very often his patients die from these and so through the ages he had to learn about drugs. That he learned plenty, is shown by the fact that today there are over thirteen hundred drugs listed in the United States Pharmacopeia. Sixty years ago, there were so many drugs being used that Oliver Wendell Holmes, the great poet and author, and also a great teacher and Doctor at Harvard, said that if all the drugs in the world were taken and thrown into the sea, it would be much better for mankind, and much worse for the fishes. Fifty years ago, when a person was sick he received lots of treatment and no diagnosis. In those

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days it was nothing to see a sick person taking seven different kinds of medicine. It was the day of the so-called gunshot prescriptions, with some concoctions having as many as twenty-five different drugs in them. Today the pendulum has swung too far the other way. It is too much diagnosis. If a patient is not cured by his family doctor in a couple of treatments, he gets into the hands of the specialist. The internist sends him to the X-ray man to have his teeth, stomach, and bowels X-rayed; to the ear, nose and throat man to have his tonsils and sinuses looked at. Before he gets through the mill, he is apt to have lost his tonsils, teeth, and appendix, but may still maintain his original symptoms, and sickness.

One hundred years ago, it was much harder for the doctor to collect his fees. In fact, he was not held in too much esteem before the turn of the twentieth century. It was probably the failure of the Drug system in those days that gave rise to the newer cults. Hahneman, with "Like cures Like," and Still, with "All pathological processes being due to spinal cord pinching." It became the day of fads — the whole wheat diet, the Graham cracker, the Saturday night bath, etc.

In quickly surveying some of the highlights in the Progress of Medicine, we find that Aesculapius, the Greek God of Medicine, was worshipped about 400 years B. C. and Hippocrates — the so-called Father of Medicine lived about 300 B. C. It was not until about 200 A. D. that Galen published his work on Anatomy and Physiology, which was not really revised until the work of Vesalius in the 16th century. In 1575, Ambrose Pare published his book upon Surgical technic. One of the greatest steps in the advancement of medicine was the work that William Harvey did, and published in 1628. He proved that blood really circulates in the body. John Hunter is supposed at this time to have become the Father of Surgical Pathology. Morton, a dentist, is credited with first using Ether in an operation in 1846. Louis Pasteur did his work on Pathogenic Organisms in the periods between 1854 to 1865, and Lister founded his antiseptic system in the periods of 1865 to 1867. The ophthalmoscope was first used by Helmholtz in 1851 and the clinical thermometer by Seguin in 1870. The Bellevue started the first Nurses training school in 1875. Finlay proved that mosquitoes carried yellow fever in 1881, and at about this time Widal first worked out his agglutination test for typhoid. Koch discovered the tubercle bacillus in 1882, and the tetanus bacillus was discovered in 1884. Von Behring first used antitoxin in 1893. The cause of bubonic plague became known in 1894. Roentgen discovered the X-ray in 1895, and Radium was found in the laboratories of the Curies' in 1898; the cause of dysentery in 1900, and syphilis in 1906. Wasserman worked out his Serological test for syphilis in

1907, and Ehrlich his treatment by Salvarsan in the same year.

The first classification of the blood into the four groups was just before World War I. Since that time we have had Insulin by Banting, Sulfanilamide by Gerhard Domagk, Penicillin by Fleming, Streptomycin, Atomic Isotopes, Vitamins, and many other therapeutic aids.

By blotting out many children's diseases with better infant care, by ridding the States of Typhoid by sanitation and vaccine, Diphtheria by Antitoxin, and Smallpox by vaccination, the last seventy-five years have seen the longevity of man increase fifteen years. The severe infectious diseases now are controlled by the sulfonamides, Penicillin, streptomycin, with the aid of replacement blood therapy. People are now living so long, that geriatrics has become a specialty.

Dr. Nathan Davis is known as the Father of the American Medical Association, which organized in 1846. Since that time the desire to learn and advance has brought America forward until today, we undoubtedly stand as the top nation in the world of Medicine. However, Medicine has become so broad in its scope that it has become impossible for one individual to know it all. For that reason, we have medicine and surgery splitting up into various branches or specialties. As more and more specialties come into the picture, it now takes much longer for the Medical student to get his training before he starts out to practice his profession. The pendulum has swung so far towards the specialties that the general Practitioner is going out of the picture. For the good of the Profession, something has to be done to entice the medical student to go into General Practice. In this State, we are concerned with the Osteopath, but in America at large the Osteopath is on the wane. In the peak year 1941, there were 485 graduates. In this year, the conservative estimate is 128. Although we are probably graduating 2000 to 3000 more M. D.'s each year, the tendency is still towards the specialty.

At the present time the Armed Forces are finding it very difficult to fill their quota of Medical Officers. There are a number of reasons for this. The recent World War left a very sour taste in the participating civilian M. D.'s. They did not like the regimentation, the method of promotions, the military discipline, and many other features connected with Service life. The big majority were disgruntled, and their complaints were multitude. They felt they were glorified housekeepers instead of specialists in their own field. They realized that the Doctors who stayed at home, although overworked, were financially reaping the harvest. For that reason, even although the services have increased the pay of their officers, the Medical Officers of the late war feel, that if they are to be reimbursed for the time lost in the war, now is the

time to get it, while wages are high, demand is great and the General Public paying the bills. In my opinion, the new T/O's and Medical Officer Rating number system will not help this condition.

The division of M. D.'s into two categories — the Specialist, and the General Practitioner, also is producing a condition all over the Country that is giving the Doctor a bad name in the eyes of the public. I refer to the refusal to make night calls. I realize that practically all Doctors are busy these days, and are reluctant to take on business at night, especially if it is a family that they do not know. The exponents of Nationalized Medicine will use it as a club to put over their legislation. We should have some system to cover night calls. I am sure none of our Doctors in our rural communities refuse to take care of their patients at any hour of the day. We can help, however, if we are ill, or out of Town, by designating someone to take over in our absence. In our larger communities this can be done by a Doctors' telephone exchange with Doctors who are willing to make night calls.

It has been the same down through the years that in Prosperous Years, the Doctors were well paid, but in depression years, the Doctor's bill is the first to go into the waste basket and the last to be paid. For that reason, the new voluntary Medical insurance plans that are sweeping the Country, should be a great boon to the Doctor. It will probably work against some of the Specialist high fees, but it will do much toward the standardization of fees all over the Country. The previous system of fees was chaotic, and through the years has exposed our entire profession to damaging criticism.

I feel that our system of State Board Examinations, reciprocity, and certification is somewhat archaic. To be sure, we have one of the toughest Medical Boards to get by in the Country—the standards are very high — and the Doctors who pass the

Maine Board can get reciprocity in nearly every State in the Union. On the other hand, it is not right that Diplomates of the various National Specialty Boards desiring to come to the State of Maine should have to wait around a number of months to take examinations. I realize that we want only well qualified M. D.'s, but without one control board, we are having many practitioners of the healing art sneaking into our towns through the back door. I am not sure a Joint Board, a Basic Science Board, or a Certifications Board is right. It is food for thought. I am sure our State Licensure laws can be smoothed up a lot.

And before I close, a few words about politics. Too long has the Doctor of Medicine, "Hidden his light under a bushel." These are the days of many social and economic outsiders settling these policies. Neither can these problems be settled in Washington or Chicago. Social and economic conditions vary in different sections of the United States. So in turn will they vary in our urban and country communities. I realize that there is a nation wide shortage of doctors, and that we are all working non-union hours. I am sure however, if we will vacation from our practice long enough to take an interest in our community problems, we will not only render a service to the public, but will be broadened in our own education. The health and welfare, government, and policies, of our local community are ours to solve, as much as the business man or lawyer. Our qualifications are the best. Like everyone else I hate to see the changes. We, however, have improved the caliber of our Medicine wonderfully in the last eighty years. The science of Medicine is bound to go forward in the years to come. The nation is becoming more and more socialized. Whether or not we run our own profession is up to us. "We really are up to our necks in politics whether we like it or not."

A hospital would not fail to provide a patient with a routine urinalysis and yet it is stated that only 0.4 per cent of cases of diabetes are discovered by such a routine procedure. The amount of significant tuberculosis discovered by providing a routine X-ray is much larger. It is also said that less than 1 per cent of patients provided a routine blood count have a blood dyscrasia. Less syphilis is found by providing routine Wassermanns than significant tuberculosis by providing a routine chest X-ray. Allan Filek, M. D., 1947 *Trans.*, NTA.

Cincinnati may be able to claim credit for having been the first American city to make tuberculosis a "reportable" disease. The distinction now is claimed by both Boston and St. Louis. . . . In the annual report of the (Cincinnati) Health Department for 1897 is a copy of resolutions adopted by the Board of Health requiring physicians to report all cases of tuberculosis. This action is believed to antedate similar action in Boston and St. Louis. *Ohio Public Health*, Oct., 1947.

THE PSYCHOSOMATIC PATIENT

MAX E. WITTE, M. D., Portland, Maine

The psychiatrist has for years realized that the mind and the body could not be separated and that if there were a sick mind, there would also be a sick body and vice versa. However, the other members of the medical profession were trained with the organic viewpoint and the usual attitude was that a disease is organic or psychogenic. The truth is that most diseases are both organic and psychogenic. Dr. J. Canby Robinson¹ states that in every case of illness, there are three interacting components that determine its character, severity, and method of treatment: (1) the disease that may be present; (2) the reaction of the patient to social and environmental conditions that may be related to the illness, and (3) the personality of the patient, including his susceptibility to emotion.

The patients that come into a doctor's office or a hospital can be divided into three groups.² Group I includes those whose symptoms are entirely psychogenic in origin or, in other words, the psychoneurotics. These cases are well known and will not be discussed in detail in this paper. However, the doctor should be cautioned not to try to explain their illness by some minor abnormal finding which is not giving any symptoms, such as visceroptosis, an abnormal position of the appendix, a few small stones in a functioning gall bladder, a small myoma of the uterus, etc. Many neurotics are receiving liver injections for a slight asymptomatic anemia, or vitamin therapy for a deficiency that does not exist. This group will comprise one-third of the patients.

Group II consists of those cases with a psychosomatic disease or those patients who have symptoms that are in part dependent upon emotional factors, even though organic findings are present. Some of these cases have no organic findings and yet do not present the picture of a neurotic. This group comprises another third of the patients and is the group to be discussed in this paper.

Group III includes those patients who have an organic disease without psychogenic etiology, such as a case of carcinoma. These patients may have emotional upsets due to their reaction to their illness, but their problems are another subject.

In this paper we are mainly concerned with Group II, the psychosomatic patient. "Psychosomatic medicine is that part of medicine which is concerned with an appraisal of both the emotional and physical mechanisms involved in the disease process of the individual patient with particular emphasis on the influence that these two factors exert on each other and on the individual as a whole."³ Psychosomatic disorders

are the development of physical symptoms in reaction to psychological stress.⁴

In the field of psychosomatic medicine, gastro-intestinal disorders are the most frequent, as the abdomen has been aptly called the "sounding board of the emotions." In this group fall gastric and duodenal ulcers, spastic, mucous, and ulcerative colitis, and a large group of patients with epigastric pain, nausea, vomiting, diarrhea, and constipation. The next most common group of disorders are those in the cardio-vascular field, such as hypertensive cardiovascular disease, coronary occlusion, angina, rheumatic heart disease, cardiac arrhythmia, and neuro-circulatory asthenia. Also here will be found a group of patients with pre-cardial pain, palpitation and hyper- or hypo-tension. In the muscular and joint field we have rheumatic disease, cases of low back pain and the so-called psychogenic rheumatism. In the gynecological field we have frigidity, dyspareunia and dysmenorrhea. In the ear and throat specialty there is tinnitus aurium and low grade sinusitis. Among diseases of the eye we find glaucoma and minor refractive errors. Then there are certain skin diseases, such as neurodermatitis, seborrheic dermatitis and psoriasis. Then there are cases of asthma, migraine, obesity, hyper-thyroidism, enuresis and impotency.

In the summer of 1947, a twenty-five-year-old woman, who was passing through Portland from a city in New York, consulted me. She stated that for a year she had been having attacks during which she had a tightening sensation in the epigastrium, she couldn't get her breath, her hands and feet became numb, and her mouth contracted. The attacks lasted from half an hour to an hour and she was usually given a hypodermic by her physician. At the onset of these attacks, she had a feeling of suffocation and gasped for air. During the attacks, her pulse was rapid and she became dizzy when she sat up. She had an attack every three weeks or might have one on two successive nights. She had vomited during the last few attacks.

For the last two or three years, she had had difficulty in getting to sleep and habitually had waked up in the middle of the night with a feeling of suffocation and shakiness. She had felt tired in the mornings, had lost quite a bit of weight and her appetite was poor. If she sat down in a movie, she had a feeling of suffocation and sometimes had to leave.

Her parents did not get along well together and were divorced in 1940. At about this time, when the patient was seventeen years old and a Junior in high

school, she had constipation, pyrosis and precordial pain for several months. She was put on a diet and later told that she could eat anything; her stomach was better until recently.

The personal history revealed that her mother had an emotional upset during the menopause. The patient was an only child, was raised with a female cousin and spent most of her time at her grandmother's home. As a child she had nightmares that woke her up and she was afraid of the dark. She stated that she was not particularly happy as a child. In 1945, she graduated from a state teachers' college; she had taught school for two years. She didn't like teaching the first year, but she liked it better the second year. She liked to be around people that she knew, but she did not like crowds and did not like to be alone. She was inclined to worry and wanted things "just so." She had had pneumonia at seven years of age, but otherwise the past medical history was negative.

This woman was alert and intelligent and gave a very good account of her illness and past life; she did not overemphasize her complaints. She showed no restlessness, anxiety or depression. Neurological examination was entirely negative; she had no tremors and her hands were not cold or perspiring.

This woman's symptoms were mainly psychogenic. This is shown by the unhappy childhood of the patient due to the incompatibility of her parents, which produced in the patient anxiety and a feeling of insecurity. Her symptoms were typically those of anxiety attacks and do not fit into the picture of an organic disease. She had had initial insomnia and morning fatigue and a claustrophobia, or fear of closed spaces. Her first upset was probably due to the divorce of her parents and her more recent trouble to her dislike for teaching. This woman was only seen for an hour; further interviews would have made the dynamics of the case clearer. She, however, is on the line between the psychoneurotic and the psychosomatic patient, probably falling into the latter group since she did not have a marked neurosis. The main differentiation between the psychosomatic patient and the neurotic is that the psychosomatic patient is not able to develop a full-blown neurosis, so that some or all of his or her repressed anxiety and other emotions is somatized or appears as physical symptoms.

The interesting fact about this woman was that she had been under the care of an internist for a year and had never seen a psychiatrist before; a psychiatric consultation had never been suggested. The reason for her coming to a psychiatrist at that time was that two days previously she had married a psychologist, who recognized the possibility of a psychogenic factor in her symptoms.

It would seem advisable to give some of the diagnostic points in picking out a psychosomatic disease. The signposts of a psychosomatic disease are (and they are probably never all present in any one case):

(1) The history of a broken home in childhood with the death of one or both of the parents or the separation of the parents.

(2) The presence of neurotic traits in childhood, such as nightmares, nail-biting, enuresis or temper tantrums.

(3) Very frequently the family history will show that a parent, sibling or some other relative, with whom the patient had spent much time in childhood, had a similar disease or symptoms. This is known as pseudo-heredity; by imitation or identification, conscious or subconscious, with the sick person, the patient is prepared for the present disease.

(4) The symptoms appear or recur after the meeting of an emotionally upsetting event.

(5) The present condition is often associated with other psychosomatic diseases or there is a history of other psychosomatic disease in the past.

(6) There may be a past history of a neurotic upset, with which the present attack may be interchangeable, although usually a patient is either a neurotic or a psychosomatic. However, a patient of mine had a history of asthmatic attacks whenever she was at her parent's farm, but the asthmatic attacks disappeared when she developed an acute anxiety state. When she recovered from the anxiety attacks, the asthma reappeared.

(7) There will be more physical complaints than there are physical signs.

(8) There will be complaints that cannot be explained by the organic disease present. For example, the patient with organic heart disease may complain of fatigue, dizziness, or fainting attacks.

(9) A psychosomatic disease should be suspected in any case in which the diagnosis is not clear.

(10) The symptoms may have been present for years or longer than would be expected with a marked organic disease.⁵

(11) It is common to get a history of the same or a similar complaint years ago. The patient frequently has had in the last half of the adolescent period symptoms similar to those that occur at a later date.

(12) The psychosomatic patient may object to being questioned about small details of his symptoms.

(13) They frequently insist on repeating the same symptom over and over.

(14) The psychosomatic patient frequently shows a compulsive urge to engage the attention of the physician, although he has nothing new to say about his symptoms.

(15) The psychosomatic patient delays in consulting a doctor and is rarely seen early in the disease. Before asking for medical treatment, he has used self-medication extensively; then he sees many doctors.

(16) A single complaint is frequently considered by the patient as being the only important one.

(17) They may give a vague and incoherent description of their symptoms.

(18) The psychosomatic patient is frequently too complacent about his symptoms. He is not anxious to leave the hospital, whereas the patient with an emotionally uncomplicated organic disease usually wants to get out as soon as possible. This factor was particularly noticeable in the Army.

(19) A particular personality type or profile appears to be associated with each particular disease. Alvarez terms the stomach ulcer patient as the "go-getter." Dunbar⁶ terms patients with coronary occlusion as "top-dogs" and those with hypertensive cardio-vascular disease as "would-be-top-dogs." Angina cases are "prima-donnas or big frogs in small puddles." Rheumatic fever patients are "teacher's pets," and the patients with rheumatic heart disease are "martyrs." Patients with cardiac arrhythmia act like "children in the dark." The diabetic is a "muddler." These personality profiles are to some extent diagnostic.

From the above it will be deduced that it is necessary with a suspected psychosomatic patient to take a very complete personal history, including status of parents, childhood life, education and school activities, occupation, marital happiness, if any, previous illness of patient and family, habits, and personality traits. The asides and apparently irrelevant remarks made by the patient are often important. It is sometimes helpful to write the time of patient's symptoms down in one column and his or her situational emotional stress in the opposite column in chronological order. In some cases a formal history does not reveal anything of note; then it is necessary to let the patient talk casually, socially and at random about his past life, meanwhile checking any discrepancies between the two methods and considering whether the patient is gaining anything by his or her symptoms. The tenseness of the patient is an important sign, which may be obvious or may be noticed only during the physical examination. The mannerisms of the patient are suggestive, such as a clenched fist, meaning conscious or subconscious hostility. It is well to remember that it is not enough to ask the patient whether he is worrying about anything, as the answer is frequently "no"; yet on taking a detailed and complete history, there may be brought to light definite circumstances that are producing emotional stress, as shown by the following case.

A man of fifty-two was seen in November, 1946. In June, 1942, he had an uncomfortable feeling in the right side of his abdomen and what the patient says was a healthy appendix was removed. The feeling in his right side was not helped and a ringing noise appeared in his right ear. In January, 1943, he was again hospitalized and 15 teeth removed under gas or ether. He had a cold and fought the anesthesia; afterwards he was quite sick. Following the operation, he developed pneumonia and had to be given sulfa drugs. During the illness he had a nightmare, in which it seemed that part of an automobile was pushing his face in; when he came to, his face was pushed against the wall and he was frightened. After that, every little noise, such as the ringing of a telephone or the opening of a faucet, gave him a funny sensation, which was like a tickle but seemed to cut through his head. He woke up four or five times a night with the feeling that he was out in space and grabbing onto something. The patient did not feel like working, because his stomach was upset and he didn't seem to digest his food. His heart seemed to act funny and he felt as though it were beating fast, but it was all right when it was checked. He had a choking sensation in his throat. He slept well but felt tired in the morning and became fatigued easily at his work. Two and a half years previously, a gastro-intestinal series had shown a duodenal ulcer in the process of healing. He had a "creepy" feeling, which started in his stomach and worked up to his throat.

The patient stated that he liked his work and was getting along well in it. He said that he had been married for 27 years and had a daughter of 21; his wife had three children from a previous marriage. Domestic relations were said to be pleasant and the patient said that all members of the family were doing well. His wife had had her uterus removed two months previously but was convalescing well.

This man had seen twelve doctors without relief before, of his own accord, he came to see the writer. He was considered to have a psychosomatic disease with a large element of anxiety; on the somatic side he had had an ulcer. He had had a normal childhood, except for some nailbiting, and had made a good industrial and educational adjustment. He apparently had no marked personality defects. In the first hour, no cause was found for his condition except the anxiety following the second operation, which did not seem to be sufficient; also he had had symptoms before that time.

The patient was seen for a treatment interview a week later. On further questioning he said that his daughter had married four years ago, just after she had finished high school, and that it was one of those war marriages; he and his wife would rather have had her wait. (His symptoms started four years be-

fore he was seen by the writer.) The daughter's husband was in the Navy for five years, and at the time of the examination she had given up her apartment, had taken a single room, was not working, had placed her three-year-old daughter with a married half-brother, and was going around with another man. In a third interview, a week later, the patient was much improved and the improvement continued. It was evident that the ventilation of the source of emotional stress with psychotherapy was sufficient to help the patient.

The ideal method would be to have a psychiatric consultation on every case where there is any possibility of an emotional factor, which would include most cases. However, there are not enough psychiatrists for this; therefore, the doctor must do his own evaluation, sending what cases he can to the psychiatrist for treatment and using his own brand of psychotherapy on the others. The patient is frequently reluctant to go to the psychiatrist, because he feels that the doctor thinks that he is insane, whereas the psychiatrist sees very few patients who are psychotic. Also the psychosomatic patient wants something found to be physically wrong with him or he is firmly convinced that his trouble is all organic: this resistance must be overcome. The neurotic can be told that he or she has been found normal from the organic standpoint and that his trouble is due to an emotional maladjustment; that with psychiatric help, he should get well soon, because he has no physical disease. The psychosomatic patient should be told that he needs help for his emotional maladjustment as well as medicine for his organic disease. The ideal solution is for the internist or surgeon and the psychiatrist to work hand-in-hand with the psychosomatic patient, the psychiatrist limiting himself entirely to psychotherapy. The patient may be told that he shows no visible signs of being nervous but that his emotional overflow is showing itself in somatic symptoms. He can also be informed that the psychiatrist will probably not want to see him more often than once a week and that the psychiatric treatment will be less or no more expensive than an operation.

There are three mechanisms that work in psychosomatic disease, according to Fenichel.⁷ (1) There are organic symptoms which have a symbolic psychological meaning; (2) there are symptoms which express emotional tensions without symbolic meaning; and finally (3) there are those symptoms which are incidental end results of emotional tension and have no psychological meaning at all. There are few cases in which an organ or a symptom becomes the means of a symbolic expression of material repressed in the subconscious; these cases are conversion hysterics or at least have a conversion mechanism, such as a woman's running nose subconsciously representing a penis or a visual defect being a subconscious defense

against or a punishment for peeping. However, most of the psychosomatic symptoms are due to an overflow of emotions. We all carry emotions from childhood, which we have not been able to liberate, which we have repressed into our subconscious where, nevertheless, they have continued to be active. Those individuals who have had an unhappy childhood due to a death of one or both parents, quarrelling or separation of their parents, or who felt unwanted or unnoticed in childhood have naturally accumulated a larger emotional overload and consequently break down easier.

As we go along through life, we add on more emotion, but we also liberate our emotions through dreams, talking, and actions. This liberation of emotion in talking or ventilation of conflicts is one of the main types of psychotherapy. The liberation of emotions take place in our daily activities and work, but particularly in recreation such as golf, bowling, boxing and bridge. The average individual is able to carry a small amount of emotions from the past and achieve a balance between the amount of emotions added each day and that liberated. The more emotions he carries from the past, the closer this balance must be; if some circumstances arise that produce a marked emotional stress, then the individual has more emotion than he can handle, particularly if his recreational outlet has been cut down. One of two things happens: if he has the right mental setup, he develops a neurosis; if he hasn't, the excess emotions become somatized or express themselves as somatic symptoms and we have a psychosomatic patient. One can draw the analogy of a bathtub in which the water level represents the emotional accumulation from the past; the water running in represents the emotions from daily life, and the outlet represents the normal emotional release. If the water comes in faster than usual or if the outlet is plugged up, the tub overflows.

The two most common emotions are fear and anger; their effect on the body is to prepare it for fight or flight with increased heart action, increased respiration, elevated blood pressure, contraction of the abdominal organs, so that the blood is sent to the periphery, etc. In the chronic emotional states mentioned above we have emotions aroused with nothing to aim at—anxiety, which is fear without an object, and general hostility, which is anger without an object. Thus we have patients who show the physiological and psychological effects of emotions with no objects to liberate them; these effects constitute most of the symptoms of the psychoneurotic and psychosomatic patient, namely palpitation, tachycardia, rapid respiration, excess perspiration, tremors, elevated blood pressure, pallor of face, etc. The patient is aware of the excess emotions and feels tense,

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NEW IDEAS ON SKIN TESTS FOR FOOD ALLERGIES

ABUSES OF THESE TESTS IN SKIN DISEASES

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Recently a woman asked me to give her a series of skin tests for food allergy for an attack of eczema. Her history is so typical that it is worth-while to repeat our conversation. All those who are interested in skin diseases have heard it many times. Two years before, this patient was given skin tests for food allergy for an attack of eczema. She was surprised to hear that she was allergic to a great many foods which had never affected her up till then. She was put on an elimination diet and her eczema faded away in two months. After her recovery, the patient lost no time in forgetting her diet. "Why didn't you continue your diet?" I asked her. "But, Doctor, my skin trouble was cured." "Do you mean to say that you had eczema because of a food allergy, or that you had a food allergy because of eczema?" "That's funny, Doctor, I never thought of that." For two years everything was alright. Then, she had another flare-up, and she immediately went on her former diet which had been so successful. Unfortunately, her condition grew worse every day. The patient came to the conclusion that she must be allergic to still other foods. She came to me for further tests. I tried, but in vain, to convince her that a real food allergy is not a phenomenon of two months' duration, and that when a person is allergic, for instance, to milk or egg, this allergy lasts for months, or years, if not for a lifetime. The patient was not convinced, because she had faith in these tests. And it was with relief that I saw her leave to go elsewhere for the treatment in which she believed.

It is surprising how many laymen have implicit faith in these tests. It is doubtless the reason why they are given so indiscriminately, even before any attempt at diagnosis is made. It is to be regretted that so many useless elimination diets are given in cases which later may prove to be: Shaving Cream Dermatitis, Infectious Eczematoid Dermatitis, Lichen Planus, Pityriasis Rosea, Psoriasis, Disseminated Lupus Erythematosus, Senile Dermatitis Exfoliativa, Mycosis Fungoides, Leukemia Cutis, etc.

It is probably also the blind confidence in the reliability of these tests which prompts some physicians to give routine tests for food allergy in healthy people asking for a complete check-up. However, these tests are not reliable. They are based on a pyramid of hypotheses, all very fragile, hypotheses which have been objected to for a long time.

The first hypothesis is that the food offender (called allergen or antigen) provokes the formation

in the patient's serum of a specific sensitizing antibody (called also reagin). For instance, ingestion of milk would provoke the formation of a milk antibody in case of milk allergy. However, this formation of antibodies would be expected in healthy people supposedly immune, but not in inadequately immune allergic patients.

The second hypothesis is that the meeting of this antibody with the offending antigen provokes the formation of histamine which is the cause of the allergic manifestations; but, the presence of this histamine has never been demonstrated.

And here is a third hypothesis: When the offender is no longer taken orally, but in scratches or in intradermal injections for the purpose of testing, it provokes a local allergic reaction in the form of a wheal if it encounters the specific antibody. A positive reaction would then prove the preexistence of this antibody and, consequently, the existence of the allergy for the tested food. The weakness of this hypothesis is obvious. Why does, for instance, the ingestion of milk provoke the formation in the serum of a milk antibody? The digestion of a food modifies it and the antibody supposed to be formed is related not to the food itself, but to its derivative. At least, that is what happens in every *delayed allergic reaction*,—eczema, for instance. Logic would tell us to test the skin not with the food itself, but with its derivative. That is the experiment made by Robert Cooke, author of a recent book on allergy,—of all textbooks, the most illuminating. In a case of eczema, demonstrated clinically to be due to milk allergy, this author obtained a negative skin test with milk itself (and that is no surprise). But—and this is the important fact—a positive skin test was obtained with the milk derivative, the milk proteose.^{1a} This result only is logical.

On the contrary, the mechanism of the reaction is probably different in an *immediate allergic reaction*: for instance, an attack of hives appearing a very short while after the ingestion of a food. In this case, but in this case only, it is possible that something from the food offender passes unmodified through the system. That is doubtless what happened in the famous case of Kustner, who developed hives immediately after eating cooked fish. By *passive transfer*, Prausnitz and Kustner were able to show the presence in Kustner's serum of a poison coming from unmodified ingested fish. If this mechanism is possible, it still is rare, as these two experi-

menters were unable to repeat similar results either in cases of other food allergies or in hay fever. And more and more authors note their dissatisfaction with skin tests after passive transfer.²

Anyway, the meaning of the skin test is quite different in these two types of skin reaction, — the delayed eczematous dermatitis and the immediate urticarial dermatitis:

(a) *Skin tests in delayed eczematous dermatitis.* The research work of Robert Cooke is of the utmost interest. It was done on eczematous infants because it is easier to hospitalize them than adults for dietetic study. These infants had positive intradermal tests for many foods. Some of them reacted to 30 different foods! In nearly every case "the foods giving positive skin tests could be eaten abundantly and continuously without any exudative skin reaction;" i.e. without aggravation of their eczema. "There has been an entire absence of any correlation between the allergens producing immediate wheal reaction and any exacerbations of the skin lesion when the reacting food was eaten in quantity and over long periods. For this reason my conclusion has been that there is no casual relationship between such allergens and dermatitis, and therefore skin testing by the scratch or intradermal method for immediate wheals is not a correct approach to a diagnosis of the cause of allergic dermatitis."^{1b} These results are the condemnation of any skin tests for food allergy, not only in infantile eczema, but in eczema in any age. These results will surprise no one who practices skin tests without preconceived ideas.

(b) *Skin tests in early urticarial dermatitis.* From the preceding, one would have the right to infer that skin tests should be a great help in the diagnosis of the cause of hives and angio neurotic edema: as is supposed to be the skin reaction in hives, they are caused by the unmodified food allergens, — and in both cases the urticarial reaction of the skin is pathologically the same.

However, practice shows that that is not the case and leading allergists recognize that these tests are of no value whatsoever in urticarial lesions. This is paradoxical and "satisfactory explanation for this apparent paradox is as yet lacking."³

The inescapable conclusion is that neither in eczematous dermatitis nor in urticarial lesions are scratch and intradermal tests of any value in food allergy. The misplaced confidence in the reliability of these tests is highlighted by recent discoveries.

As a result of this mistake, some affections were wrongfully considered as food allergy, whereas today it has been confirmed that they were due either to malnutrition, to infection, or to contact dermatitis.

a) As examples of malnutrition, we note these cases of infantile eczema, which, in spite of positive skin tests to milk, seemed not to be related to a milk

allergy, but to a deficiency in unsaturated fatty acids. Another example is given by Senile Dermatitis Exfoliativa. This disease has been mistakenly attributed to food allergy, on account of positive skin tests for food, and patients with this condition were put on a dangerous elimination diet. It is recognized today that they suffer chiefly from a poor diet low in protein and vitamins.

b) The same mistake has been made concerning some infectious skin diseases. For instance, for years patients with Dermatitis Herpetiformis have been put on elimination diets. This disease is cured today, if not permanently, at least temporarily, with sulfa-pyridine, a drug reserved for bacterial and virus infections.

c) Finally, the importance of contact offenders is recognized more and more every day. This importance was emphasized once more at the last Atlantic Dermatologic Conference a few months ago. This conception is, little by little, replacing the one of food allergy. Many "eczemas" of adults and many infantile eczemas are today considered to be nothing but Contact Dermatitis, — and that in spite of the information given by skin tests for food allergy.

Relative Importance of Food Allergy:

The mistaken confidence in the reliability of the skin tests for food allergy has had another unfortunate consequence. It has led to the belief that food allergies are very common. On the contrary, while they are highly important in special cases "they are relatively uncommon in adults and in children after the sixth year."^{1c}

Biotropism vs. Allergy:

Another reason why food allergies have been erroneously considered frequent is that some infectious skin diseases can be reactivated by ingestion of some foods. For instance a latent herpetic virus infection can be reactivated by ingestion of fruit juices, or nuts, or sharp cheese, and give a flare-up of canker sores in the mouth. This kind of Herxheimer reaction has nothing to do with a food allergy. It is just a peculiar case of a general phenomenon called *Biotropism*, according to which a latent infection can be reactivated by another infection, or by a physical or chemical agent. This theory, expressed in France 20 years ago, has found in this country more and more supporters. It may soon displace in many instances the theory of allergy, and may give a rebirth to pasteurian theories in the matter of skin diseases.⁴

Patch tests in food allergy:

A curious fact is the importance recently given to patch tests in food allergy. R. Cooke relates among other cases a curious one of allergic eyelids. Clinical

study showed an obvious allergy to tomato. Intradermal test was negative to tomato, while the patch test only was positive to this food.^{1d}

These facts cannot be accepted unless we admit that intrinsic allergy by food ingestion is combined with extrinsic allergy by food contact. It is probably the latter which is revealed by the patch test. In any case, it is too early to come to a decision on this recent technique.

CONCLUSION

If we accept the new ideas on skin testing, ideas which seem logical, the following conclusions can be drawn:

(1) The technique of scratch or intradermal tests for food allergies is based on very questionable hypotheses.

(2) The practical results of these tests are unreliable.

(3) After the age of 6 years, food allergy is rare.

(4) To attribute systematically the majority of our skin troubles to food allergy is to restrict out of all proportion the field of dermatology and run the risk of becoming a public danger.

(5) These abuses are liable to discredit the technique of skin tests in general, which, however, is of the utmost help in other fields of allergy.

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"INTRA-ABDOMINAL HEMORRHAGE FROM RUPTURE, BY PREGNANCY, IN STUMP OF AMPUTATED FALLOPIAN TUBE"

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CASE REPORT

D. B., Maine General Hospital, # 65204, Path. 1349/47.

A twenty-eight (28) year old married woman, with one child six (6) years old. Past history is unimportant except:

1. Severe lower abdominal pain at regular fourteen (14) day post menstrual intervals of several years' duration.

2. Operation elsewhere, eleven (11) months ago, left salpingo-oophorectomy, resection of right ovarian cyst and incidental appendectomy, for above mentioned inter-menstrual pain. (Symptomatic result unsatisfactory.)

Present Illness:

Patient was fifteen days past normal period date (without menstrual flow) when she suffered severe pain in the lower abdomen not unlike the onset of her expected bout of inter-menstrual discomfort. This continued throughout the night with increasing severity. In early morning she noted dizziness and weakness when she tried to get out of bed. When seen shortly thereafter she showed extreme pallor, rapid weak pulse, low blood pressure and a tender, distended abdomen. With the above history a diagnosis of intra-abdominal hemorrhage from probable ruptured ectopic pregnancy (right) was made. Patient was sent promptly, via ambulance, to the hospital.

An immediate infusion of saline and glucose was

given while preparations for whole blood transfusion and operation were being made. Sodium Lactate was given for pre-transfusion alkalization.

Ether anesthesia was used and a low midline incision was made. The right tube was normal, the right ovary contained many small cysts. The uterus was of normal size but very soft and boggy. At the left cornu of the uterus the stump of the previously amputated tube was torn and bleeding. It was impossible to determine clinically the extent of the laceration into the tube stump or the uterus. With suction, fifteen hundred (1500) cc. of liquid whole blood was filtered, citrated, and saved for auto transfusion; approximately seven hundred-fifty (750) cc. of clotted blood was manually removed from the abdomen. A simple supracervical hysterectomy was then done leaving the right tube and ovary. During the procedure the patient received five hundred (500) cc. of whole blood and five hundred (500) cc. of the auto transfusion blood. Two hours later she received the remaining (1000) cc. of the auto transfusion blood. Two days later, a second five hundred (500) cc. of whole blood was given.

Summary of the pathological report was:

1. Cornual pregnancy.
2. Dicial reaction of uterus.
3. Adenomyosis, Grade I.

Post-operative course was uneventful. Patient was discharged on the tenth (10) post-operative day.

CLINICO-PATHOLOGICAL EXERCISE

Medical case presented at the Eastern Maine General Hospital

DR. GEORGE ROBERTSON, presiding

Edited by JOSEPH E. PORTER, M. D.

This 52-year-old negro woodsman was admitted to the Eastern Maine General Hospital with a history of mild diabetes of eight years' duration. He had never taken insulin and had not maintained a diet. His chief complaint on admission was drowsiness and general malaise of two weeks' duration. Three hours before admission he began to have diarrhea (8 stools in 3 hours) accompanied by nausea and vomiting which occurred three times. He also complained of backache and shoulder pain. At the time of admission he exhibited euphoria and depression. His past history revealed treatment for lues. In the past five years he has lost 50 pounds in weight.

Physical examination revealed pin point pupils which failed to react to light. There were moist rales in the left apex. The heart sounds were distant. Reflexes not obtained. The blood pressure on admission was 60/50. Temp. 95° F.; Pulse 50/min.; Resp. 15/min.; Wt. of patient 150 lbs.

Laboratory Findings: Blood sugar 400 mgm. per 100 cc. Urine: amber, cloudy, acid, 1.012. Very heavy trace of albumin. Sugar 0.3%. Acetone negative. Examination of the sediment revealed occasional epithelial cells, a few leukocytes, frequent bacteria and many amorphous urates.

Blood: Hb 13 gms. (83%); WBC 8,700. NPN 58 mgm./100 cc. Kahn and Hinton positive.

Course in Hospital: The patient was admitted at approximately 9:00 P. M. On the night of admission the patient received 150 units of regular insulin subcutaneously and 3000 cc. of saline intravenously. At 2:00 A. M. the blood sugar was still 400 mgm./100 cc. and the urine showed 0.5% sugar. The blood pressure by this time had dropped to 44/32 mm. Hg. At 4:30 A. M. he received 50 units of regular insulin, at 11:30 A. M. he received 10 units, and at 4:30 P. M. he received 10 units. By this time his blood sugar had dropped to 51 mgm./100 cc., and his blood pressure had risen to 80/55 mm. Hg. In the morning he was alert and coöperative. Toward evening he apparently felt well, but was a bit drowsy. At 9:00 P. M. the blood sugar was 75 mgm./100 cc. His pulse was good at this time. His urine sugar had dropped to 0.25%. The following morning the urine was free of sugar. The blood sugar was 65 mgm./100 cc. The patient, however, was unresponsive and his pulse could not be obtained. He expired

at 8:20 A. M. The only fluid received on the second day was approximately 12 ounces of orange juice. The temperature had gradually risen to 99° F., the pulse to 60/min. and respirations to 18/min.

DISCUSSION

Dr. Herbert Clough: This patient being a negro made me think of some of the common diseases which negroes have, such as tuberculosis and lues. This patient is a luetic with a known history of diabetes for which he has never been treated or taken treatment. His chief complaint was drowsiness and general malaise for two weeks followed by diarrhea. That is not common in diabetes. One wonders whether he was getting heavy metal effects from antiluetic treatment. Perhaps there was some trouble with the pancreas, which might have caused diarrhea. The backache and shoulder pain is consistent with diabetes mellitus. One can have these pains in the presence of acidosis. Loss of weight is consistent with diabetes. Pin point pupils which fail to react to light can also be found in a tabetic, as well as with brain tumors involving certain areas. The moist rales in the left apex suggest heart failure, although one would expect to find the rales at the bases. He could also have had acid-fast infection, i.e. pulmonary tuberculosis. It is often seen as a complication of diabetes. The heart sounds were distant. One wonders if he was developing a cardiac tamponade. The blood pressure and pulse pressure were low, 60/50, 44/32, 80/55. His blood sugar was very high and continued high during his first eight hours in the hospital; it was 200 mgm./100 cc. the next morning, then dropped down following the administration of more insulin. The heavy trace of albumin is quite consistent with diabetes with acidosis. Albuminuria in diabetes is due to intercapillary sclerosis and loss of glomerular filtration. A nephrotic picture may be seen in lues with heavy metal poisoning. He could have had amyloid disease, involving the kidneys and liver. Apparently when he came in he got a large amount of insulin and 3000 cc. saline in an effort to snap him out of the coma. I think possibly he went into hypoglycemic shock later on. Insulin was given without sugar, which is still done by many internists. He received just one intravenous of saline and later went into hypoglycemic shock, expiring within 36

hours after admission. All the symptoms appear consistent with severe diabetes with acidosis in the presence of lues. I might mention adrenal disease and pulmonary tuberculosis, but I don't think he had either one.

Dr. Wilbur Manter: Were there any other urines done for acetone?

Dr. Richard Wadsworth: Only one was reported. The other urines were apparently done on the ward and no record was made of the acetone.

Dr. Robertson: Could you have diabetic acidosis without acetone in the urine?

Dr. Clough: Yes, but it would be unusual.

Dr. Manter: In physical examination was any comment made of the liver? The liver has also a part to play in metabolism of sugar and in diabetes.

Dr. Wadsworth: The only comment on the physical examination was that no masses were felt in the abdomen. However, I suppose it would be quite fair in order not to misrepresent the facts to say that at the autopsy the liver extended 2 cms. below the right costal margin in the mid-clavicular line.

Dr. Clough: He showed symptoms of acidosis, viz. drowsiness, nausea, vomiting and diarrhea. This could be attributed to his diabetes. Acidosis could be present with a negative acetone. We have made no mention of adrenal failure. Irreversible changes may have taken place in the adrenals. The very heavy trace of albumin is quite consistent with adrenal failure. He could have had hypoglycemic shock. Tuberculosis of the adrenal glands, which is most common in Addison's disease, might produce these symptoms with a low pulse pressure. It might be possible to explain the whole picture by postulating a tumor of the pancreas extending to the adrenals.

Dr. Robertson: Is tuberculosis of the adrenals the most common cause of Addison's disease?

Dr. Wadsworth: In the past ten years there have been many more cases of Addison's disease which were not due to tuberculosis. Originally in the early years following Addison's description it was felt to be due almost entirely to tuberculosis of the adrenals.

Dr. Manter: He lost 50 pounds of weight in five years. Was he emaciated, poorly nourished?

Dr. Wadsworth: There is nothing in the chart to show that. When he came to autopsy he did not appear to be emaciated. He had fairly abundant subcutaneous fat over the abdomen, although there was little subcutaneous fat over the thorax.

Dr. Lloyd Brown: The rales in the upper chest, weight loss, and the fact that diabetics often get tuberculosis suggest adrenal tuberculosis. Was an electrocardiograph taken? Could the low blood pressure be due to coronary occlusion?

Dr. Wadsworth: An electrocardiograph was not done.

Dr. Joseph Lezberg: How low must blood sugar get before you treat a patient for insulin shock?

Dr. Robertson: It varies in different individuals. It sometimes gets down to 40 or 50 mgm./100 cc. The lack of acetone in urine would be against his being in severe diabetic coma. His low pulse, backache and shoulder pains could be attributed to acute adrenal failure. After admission the administration of 3000 cc. saline caused him to appear fairly bright. He then lapsed back into state of unresponsiveness in spite of control of his diabetes. The 50-pound weight loss, and rales at the left apex suggest tuberculosis with several vital organs involved. If given more fluids and more sugar it is possible that the patient might have survived. I am impressed by the fact that he was a negro and a diabetic. The physical findings and laboratory data are not sufficient to establish the diagnosis of diabetic coma. The lack of acetone is an important finding. There are rare cases of diabetic coma without acetonuria. One should also test for diacetic acid. There are other things against diabetic coma. The respirations were to 15/18. In diabetic coma one expects rapid, deep respirations. The patient felt better the next day before he had a drop in his blood sugar. He had received 3000 cc. saline. This is important and suggests involvement of the adrenal gland. Addison's disease and diabetes rarely accompany each other. With apical rales tuberculosis is the most likely diagnosis. He had a subnormal temperature which, towards the end, rose to 99° F. This is very important in diabetes. Patients come in with normal temperature and following therapy fever occurs. When the patient is then re-examined there may be found frank signs of a lobar pneumonia. One might consider Addison's disease due to metastatic carcinoma of the adrenals secondary to a bronchogenic carcinoma. Against the diagnosis of intercapillary glomerulosclerosis is the absence of hypertension and edema. It is interesting that he had many bacteria in the urine, suggesting renal papillitis, a disease described by Robbins, Mallory and Kinney in diabetic patients. They usually have high fever and evidence of urinary tract infection.

Dr. Wadsworth: Dr. Clough did very well to pick up two leads in the physical examination, viz. distant heart sounds and low pulse pressure, which suggested beginning cardiac tamponade. On post mortem examination there was in the abdominal cavity 500 cc. of bright yellow slightly turbid but not purulent fluid. The liver was 2 cms. below the right costal margin, 6.5 cms. below the tip of the xiphoid. There were 350 cc. of straw-colored fluid in the right pleural cavity. The Pericardial Cavity contained 50 cc. of thick yellow purulent fluid. The heart weighed 375 grams, just slightly enlarged, considering his size.

Continued on page 215



FORREST B. AMES, M. D.
President, Maine Medical Association
1948 - 1949

FORREST B. AMES, M. D.

Forrest B. Ames, M. D., of Bangor, assumed his duties as President of the Maine Medical Association at the close of the 94th annual session banquet, Tuesday evening, June 22nd, at Poland Spring, Maine.

Doctor Ames was born in Bangor, Maine, May 16, 1891. He was graduated from Bangor High School in 1909, the University of Maine in 1913, and received his medical degree from Harvard Medical School in 1919. He practiced medicine in Boston from 1920 to 1923, and has since been located in Bangor where he specializes in Roentgenology. He has been connected with the Eastern Maine General Hospital in Bangor for many years.

He is a member of the American Roentgen Ray Society, the New England Roentgen Ray Society, the Radiological Society of North America, Inc., and the American College of Radiology, a Fellow of the American Medical Association, and a Member of the Maine Medical Association and the Penobscot County Medical Society. He served as Secretary-Treasurer of the Penobscot County Society for several years.

Doctor Ames has been active in Maine Medical Association affairs for many years, has served on several committees, and as Councilor for the Sixth District for four years, the last two as Chairman.

The members of the Association chose wisely when they elected Doctor Ames as their President.



RALPH A. GOODWIN, M. D., PRESIDENT-ELECT

Ralph A. Goodwin, M. D., of Auburn, was elected President-elect of the Maine Medical Association at a General Assembly held Monday afternoon, June 21st, during the 94th annual session at Poland Spring, Maine.

Doctor Goodwin was born in Danforth, Maine, December 13, 1884. He was graduated from Bates College in 1908 and from Harvard Medical School in 1913. He has practiced medicine in Auburn since 1916.

Doctor Goodwin has been a member of the Surgical Staff of the Central Maine General Hospital since 1920, and has served as Physician to Bates College for twenty-five years.

He was made a Fellow of the American College of Surgeons in 1934, and is a member of the American Medical Association, the Maine Medical Association, and a Past President of the Androscoggin County Medical Society. He served as Councilor for the First District of the Maine Medical Association for three years, the last of these as Chairman.

He is a Past President of the Auburn-Lewiston Kiwanis Club.

His family consists of Mrs. Goodwin, a son, Dr. Ralph A. Goodwin, Jr., Resident on the Eye Service of the Billings Hospital of Chicago University, and twin daughters, Marguerite and Jeanette.

Councilors and Council Chairman Elected at the 94th Annual Session
of the
MAINE MEDICAL ASSOCIATION

POLAND SPRING

JUNE 20, 21, 22, 1948



C. HAROLD JAMESON, M. D., Rockland
Chairman, 1948 - 1949



EUGENE H. DRAKE, M. D., Portland
Councilor, First District, 1951



JAMES A. MACDOUGALL, M. D., Rumford
Councilor, Second District, 1951

THE PRESIDENT'S PAGE

In these days of "planned" programs it may not be amiss to list some of the activities which should be carried on in the coming year by the Maine Medical Association. Not in order of importance these may be outlined as follows:

1. Re-establishment of the Maine Medical School.
2. Prepaid insurance for surgery and obstetrics.
3. Rural health.
4. Public relations.
5. Training of attendant nurses.
6. Care of veterans.
7. Civilian medical defense.
8. Voluntary service in connection with the new draft law.
9. Graduate medical education.
10. Development and distribution of better medical care.

Most of these activities will be carried on the county and state levels. Some extend to the national level. All can be met only if individual members, county societies, and all committee chairmen and officers of the Maine Medical Association coöperate wholeheartedly.

We have the "planned" program. May we also have the necessary coöperation to carry our plans to successful accomplishment.

FORREST B. AMES, M. D.,
President, Maine Medical Association.

EDITORIAL

The 94th Annual Session in Review

The 94th Annual Session of the Maine Medical Association held at Poland Spring, June 20, 21 and 22, is now history, but it will be many weeks before the convention is forgotten by the many who attended. The total registration was 541; 270 members and 271 guests, including doctors' wives, non-member physicians and exhibitors.

A meeting of the Council which was called to order at 1.40 P. M., Sunday, June 20th, by Council Chairman, Dr. Ralph A. Goodwin of Auburn, preceded the official opening of the session. At this meeting the following Budget for 1948-1949 was drawn up for the consideration of the House of Delegates:

Office of the Secretary-Treasurer-Editor:

President's Expenses,	\$ 350.00
Salaries:	
Secretary-Treasurer-Editor,	4,000.00
Assistant Secretary,	3,000.00
Expenses:	
Secretary-Treasurer,	300.00
Office,	1,200.00
Committees:	
Medical Advisory	1,000.00
Graduate Education	100.00
Special Committees,	500.00
State Delegates and Council,	500.00
Delegate, American Medical Association,	400.00
Clinical Session, Maine Medical Association,	300.00
Council, New England State Medical Societies,	100.00
	<hr/>
	\$11,750.00

Office of the Executive Secretary:

Salaries:	
Executive Secretary,	\$6,500.00
Secretary,	1,820.00
Office, Travel, and other Expenses,	3,680.00
	<hr/>
	\$12,000.00
	<hr/>
Total,	\$23,750.00

The First Meeting of the House of Delegates — official opening of the session—was called to order at 3.00 P. M., by Forrest B. Ames, M. D., of Bangor, then President-elect, with thirty-one of the thirty-six county delegates present. Included in the Order of Business for this meeting was the appointment of a Reference Committee consisting of Dr. Foster C. Small, Chairman, and Drs. Delbert M. Stewart, Lawrence M. Cutler, P. L. B. Ebbett, and Harold

M. Small, and the appointment of a Nominating Committee consisting of six members, one from each Councilor District. (The Nominating Committee and their report as presented at the Second Meeting of the House appears elsewhere in this issue of the JOURNAL.)

The Council Report for 1947-1948 and the suggested Budget for 1948-1949 which were presented by the Chairman, Dr. Goodwin, were approved. It was voted that in the future each delegate receive a copy of the Financial Statement for the Association and JOURNAL prior to the annual meeting. The reports of Committees not published in the June issue of the JOURNAL, and of Delegates to Out of State meetings, which were heard at this meeting will be published in future issues of the JOURNAL. The following matters were referred to the Reference Committee. 1). Appointment of a committee to work with the Executive Secretary to bring the Association Constitution and By-Laws up to date. 2). Organization of a Woman's Auxiliary to the Maine Medical Association. 3). Recommendations relative to the Nursing Shortage as presented by Dr. Clyde I. Swett of Island Falls. 4). Prepaid Medical Care Plan.

At the Second Meeting of the House held Monday, June 21st, at 4.30 P. M., the report of the Reference Committee as presented by Dr. Small, Chairman, which recommended approval of the matters presented to the committee for consideration, was approved. The President was instructed to appoint a special committee to bring the Association Constitution and By-Laws up to date. The organization of a Woman's Auxiliary to the Maine Medical Association was approved. The recommendations relative to the Nursing Shortage as presented by Dr. Clyde I. Swett were accepted, and it was voted that the Prepaid Medical Care Plan be approved for one year. Dr. Eugene H. Drake, of Portland, was elected Councilor for the First District, and Dr. James H. MacDougall, of Rumford, Councilor for the Second District. Thomas A. Foster, M. D., of Portland, was re-elected Delegate to the American Medical Association for a two-year term.

A Third Meeting of the House was held Tuesday, June 22nd, at 12.00 noon, at which it was voted that Section 3, Chapter VII, of the By-Laws be amended to read: "The Committee on Legislation shall consist of five members to be appointed by the President." This committee and other special committees appointed by the President will be found elsewhere in this issue of the JOURNAL.

Space does not permit me to cover all details of these meetings but the stenographic report will be published in part in future issues of the JOURNAL.

Ralph A. Goodwin, M. D., of Auburn, was elected President-elect of the Association at the close of the General Assembly, Monday afternoon. Dr. Goodwin has all the qualifications for this office and will, I am sure, serve you well.

At the organization meeting of the Council held Tuesday, June 22nd, C. Harold Jameson, M. D., of Rockland, was elected Council Chairman. Frederick R. Carter, M. D., of Portland, was re-elected Secretary-Treasurer of the Association and Editor and Business Manager of THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION. Mrs. Esther M. Kennard of Portland was re-elected Assistant Secretary of the Association and Assistant Business Manager of the JOURNAL.

The concensus of opinion favored the General Assembly type of program which featured this year's meeting—all assemblies were well attended by seemingly interested members and guests. The evening programs, which were also well attended, presented a variety of entertainment; social and professional.

The Golf Tournament, which this year included the ladies, is well covered by Francis A. Winchenbach, M. D., Chairman of the Scientific Committee, in the "Correspondence" which follows. Dr. Winchenbach and the members of his Committee are to be commended for the excellence of the program for this 94th annual session of the Association.

In closing I want to thank the many companies who made up the Commercial Exhibit — the largest in our history — for their support of our Association and for their contributions to our Golf Tournament.

CORRESPONDENCE

The 1948 Golf Tournament

6 July, 1948.

FREDERICK R. CARTER, M. D.,
Secretary-Treasurer,
Maine Medical Association,
Portland, Maine.

Dear Fred:

I would like to thank all members of the Scientific Committee and those who participated in the program, for their splendid coöperation and excellent presentations.

Everyone I talked with had a good time and thought that the papers and exhibits were excellent.

The entertainment was a profound success and the entries in the golf tournaments exceeded expectations. The generosity of exhibitors made this tournament our outstanding one to date. The winners and donors of prizes I have listed for you.

1st Gross—76. Dr. Francis A. Winchenbach. Annual trophy by Surgeons' and Physicians' Supply Co., and Bulova wrist watch by U. S. Vitamin Corp.

2nd Gross—83. Dr. Martyn A. Vickers. Trophy by E. F. Mahady Co.

3rd Gross—84. Dr. Lloyd Brown. Trophy by Maine Surgical Supply Co.

1st Net—Dr. Thomas F. Fay. Lighter by Parke, Davis Co., and penicillin by Schenley.

2nd Net — Dr. Seth H. Read. Utility Bag by Thomas Reed Co.

3rd Net—Dr. Norman E. Cobb. Tote Light by George C. Frye Co.

Kickers' Tournament. 1st—Dr. Walter D. Mazzacane, desk clock by Mead Johnson. 2nd—Dr. T. Angus, Billfold by Mead Johnson.

Women's Division. 1st Gross—Mrs. Ruth Small. Trophy by Lederle.

2nd Gross—Mrs. James M. Parker. Lighter by Upjohn Company.

1st Net—Mrs. Walter D. Mazzacane. Desk pen set by Mead Johnson.

2nd Net—Mrs. Philip H. McCrum. Cigarettes by Philip Morris.

The guest prize—Dr. D. H. R. Lester, golf lighter by Maine Medical Association.

Gifts of Alkalol and hand lotion by Searle were desired by someone, not in the tournament and expropriated.

Your office and your secretaries performed in their usual efficient, pleasant manner which made the work of the Committee light and enjoyable.

Yours truly,

/s/ FRANCIS A. WINCHENBACH, M. D.,
Chairman, Scientific Committee,
94th Annual Session.

STANDING COMMITTEES

1948 - 1949

The Standing Committees for 1948-1949 were drawn up by the Nominating Committee, consisting of one delegate from each Councilor District, and accepted at the Second Meeting of the House of Delegates at the 94th Annual Session of the Maine Medical Association at Poland Spring, Maine, June 21, 1948.

NOMINATING COMMITTEE

First District, JAMES H. CROWE, M. D., *Chairman*.

Second District, FRANK A. SMITH, M. D.

Third District, LESTER ADAMS, M. D.

Fourth District, PAUL A. MILLINGTON, M. D.

Fifth District, THEODORE E. HARDY, M. D.

Sixth District, RALPH C. STUART, M. D.

Scientific Committee

Martyn A. Vickers, M. D., Bangor (One Year), *Chairman*

Theodore E. Hardy, M. D., Waterville (Two Years)

Carl E. Richards, M. D., Sanford (Three Years)

Franklin F. Ferguson, M. D., Portland (Four Years)

The Secretary, ex-officio

Cancer Committee

William Holt, M. D., Portland (One Year), *Chairman*

Magnus F. Ridlon, M. D., Bangor (Two Years)

Forrest B. Ames, M. D., Bangor (Three Years)

Joseph E. Porter, M. D., Portland (Four Years)

Irving I. Goodof, M. D., Lewiston (Five Years)

John F. Reynolds, M. D., Waterville (Six Years)

Committee on Medical Education and Hospitals

Albert W. Fellows, M. D., Bangor, *Chairman*

Glidden L. Brooks, M. D., Lewiston

Edward L. Herlihy, M. D., Bangor

Richard S. Hawkes, M. D., Portland

Committee on Social Hygiene

Oscar R. Johnson, M. D., Portland (Two Years), *Chairman*

Carl E. Blaisdell, M. D., Bangor (One Year)

Donald L. Anderson, M. D., Lewiston (Three Years)

Medical Advisory Committee

Allan Woodcock, M. D., Bangor, *Chairman*

Carl M. Robinson, M. D., Portland

Frank A. Smith, M. D., Westbrook

Phillip L. Gray, M. D., South Brooksville

C. Harold Jameson, M. D., Rockland

Oscar F. Larson, M. D., Machias

Gerald H. Donahue, M. D., Presque Isle

The Secretary, ex-officio

Publicity Committee

Frederick R. Carter, M. D., Portland, *Chairman*

President, Forrest B. Ames, M. D., Bangor

President-elect, Ralph A. Goodwin, M. D., Auburn

Legislative Committee*

P. L. B. Ebbett, M. D., Houlton, *Chairman*

Glidden L. Brooks, M. D., Lewiston

James H. Crowe, M. D., Ellsworth

Warren E. Kershner, M. D., Bath

Manning C. Moulton, M. D., Bangor

W. Mayo Payson, Executive Secretary, Clerk

* Appointed by the President.

Public Relations Committee

Frederick T. Hill, M. D., Waterville, *Chairman*

Irving I. Goodof, M. D., Auburn

M. Tieche Shelton, M. D., Augusta

Warren E. Kershner, M. D., Bath

Theodore C. Bramhall, M. D., Portland

SPECIAL COMMITTEES**1948 - 1949**

The following Special Committees for 1948-1949 were appointed by the President,
Forrest B. Ames, M. D., of Bangor.

Committee on Graduate Education

Joseph E. Porter, M. D., Portland, Chairman
William V. Cox, M. D., Auburn
George F. Maltby, M. D., Portland
Magnus F. Ridlon, M. D., Bangor
George E. Young, M. D., Skowhegan
Wilfrid J. Comeau, M. D., Bangor
M. Tieche Shelton, M. D., Augusta

Tuberculosis Committee

Loren F. Carter, M. D., Presque Isle, Chairman
Walter R. Gumprecht, M. D., Bangor
Francis J. Welch, M. D., Portland
Lester Adams, M. D., Hebron
George E. Young, M. D., Skowhegan
Rufus E. Stetson, M. D., Damariscotta
Charles B. Popplestone, M. D., Fairfield
Edward A. Greco, M. D., Portland
Dean H. Fisher, M. D., Augusta

Committee on Maternal and Child Welfare

Thomas A. Foster, M. D., Portland, Chairman
Clair S. Bauman, M. D., Waterville
Leroy C. Gross, M. D., Auburn
Alice A. S. Whittier, M. D., Portland
Virginia C. Hamilton, M. D., Bath
Theodore M. Stevens, M. D., Portland

Committee on Industrial Health

Merrill S. F. Greene, M. D., Lewiston, Chairman
Edwin M. Fuller, M. D., Bath
Allan Woodcock, M. D., Bangor
Ernest T. Young, M. D., Millinocket
Albert P. Royal, M. D., Rumford
Albert C. Todd, M. D., Brewer

Committee on Conservation of Vision

Howard F. Hill, M. D., Waterville, Chairman
S. Judd Beach, M. D., Portland
Dexter J. Clough, 2d, M. D., Bangor
Warren E. Kershner, M. D., Bath
William R. McAdams, M. D., Portland

Amy W. Pinkham Fund Committee

P. L. B. Ebbett, M. D., Houlton, Chairman
Virginia C. Hamilton, M. D., Bath
Albert M. Carde, M. D., Milo
Clair S. Bauman, M. D., Waterville
Ella Langer, M. D., Augusta
Thomas A. Foster, M. D., Portland
Norman H. Nickerson, M. D., Greenville

Committee to Coöperate with National Physicians' Committee

Martyn A. Vickers, M. D., Bangor, Chairman
Francis A. Winchenbach, M. D., Bath

Committee on Civilian Medical Defense

Charles W. Steele, M. D., Lewiston, Chairman
Ralph A. Getchell, M. D., Portland
Harry Butler, M. D., Bangor

Committee to Formulate Plans for Re-opening Medical School of Maine

Edward L. Herlihy, M. D., Bangor, Chairman
Clyde I. Swett, M. D., Island Falls
Harvey C. Bundy, M. D., Milo
Frederick T. Hill, M. D., Waterville
Stephen A. Cobb, M. D., Sanford
Adam P. Leighton, M. D., Portland
Eugene H. Drake, M. D., Portland
Wallace E. Webber, M. D., Lewiston
Eugene E. O'Donnell, M. D., Portland
Dean H. Fisher, M. D., Augusta

Veterans' Affairs Committee

Harold E. Pressey, M. D., Bangor, Chairman
Elton R. Blaisdell, M. D., Portland
Currier C. Weymouth, M. D., Farmington
Francis A. Winchenbach, M. D., Bath
Edward H. Risley, M. D., Waterville
Philip O. Gregory, M. D., Boothbay Harbor

Health Insurance Committee

Eugene H. Drake, M. D., Portland, Chairman
Edward L. Herlihy, M. D., Bangor
Clyde I. Swett, M. D., Island Falls
Frank A. Smith, M. D., Westbrook
Theodore C. Bramhall, M. D., Portland
Eugene E. O'Donnell, M. D., Portland
M. Tieche Shelton, M. D., Augusta
W. Mayo Payson, Executive Secretary, Clerk

Committee on Rural Health

Norman H. Nickerson, M. D., Greenville, Chairman
Harry Brinkman, M. D., Farmington
Stanley R. Lenfest, M. D., Waldoboro
Wallace E. Viles, M. D., Turner
Storer W. Boone, M. D., Presque Isle
Harvey C. Bundy, M. D., Milo
W. Mayo Payson, Executive Secretary, Clerk

Committee to Supervise Training of Nurses' Attendants

Clyde I. Swett, M. D., Island Falls, Chairman
Foster C. Small, M. D., Belfast
Frank A. Smith, M. D., Westbrook
Currier C. Weymouth, M. D., Farmington
C. Harold Jameson, M. D., Rockland
W. Mayo Payson, Executive Secretary, Clerk

Committee on Blood Transfusions

Richard C. Wadsworth, M. D., Bangor, Chairman
Joseph E. Porter, M. D., Portland
Gilbert Clapperton, M. D., Lewiston
Joseph A. Donovan, M. D., Houlton
John F. Reynolds, M. D., Waterville

Committee to Study Revision of Constitution and By-Laws

Stephen A. Cobb, M. D., Sanford, Chairman
Ralph A. Goodwin, M. D., Auburn
Eugene E. O'Donnell, M. D., Portland
Ralph C. Stuart, M. D., Guilford
Theodore E. Hardy, Jr., M. D., Waterville
W. Mayo Payson, Executive Secretary, Clerk

COUNTY SOCIETIES

Androscoggin

President, Paul R. Chevalier, M. D., Lewiston
Secretary, Glidden L. Brooks, M. D., Lewiston

Aroostook

President, Gerald H. Donahue, M. D., Presque Isle
Secretary, Clyde I. Swett, M. D., Island Falls

Cumberland

President, Harold J. Everett, M. D., Portland
Secretary, Joseph E. Porter, M. D., Portland

Franklin

President, Maynard B. Colley, M. D., Wilton
Secretary, Kenneth A. LaTourette, M. D., Farmington

Hancock

President, M. A. Torrey, M. D., Ellsworth
Secretary, Robert H. Delafield, M. D., Ellsworth

Kennebec

President, William L. Gousse, M. D., Fairfield
Secretary, Arch H. Morrell, M. D., Augusta

Knox

President, Wesley N. Wasgatt, M. D., Rockland
Secretary, Freeman F. Brown, Jr., M. D., Rockland

Lincoln-Sagadahoc

President, Virginia C. Hamilton, M. D., Bath
Secretary, Donald B. Hawkins, M. D., South Bristol

Oxford

President, Willard H. Boynton, M. D., Bethel
Secretary, Dexter E. Elsemore, M. D., Dixfield

Penobscot

President, Martin C. Madden, M. D., Old Town
Secretary, Herbert C. Scribner, M. D., Bangor

Piscataquis

President, George C. Howard, M. D., Guilford
Secretary, Norman H. Nickerson, M. D., Greenville

Somerset

President, George F. Sullivan, M. D., Bingham
Secretary, H. Carl Amrein, M. D., Madison

Waldo

President, John A. Caswell, M. D., Belfast
Secretary, Raymond L. Torrey, M. D., Searsport

Washington

President, John F. Hanson, M. D., Machias
Secretary, John Young, M. D., Jonesport

York

President, Paul S. Hill, Jr., M. D., Saco
Secretary, C. W. Kinghorn, M. D., Kittery

COUNTY SOCIETY NOTES

Cumberland

A meeting of the Cumberland County Medical Society was held at the Eastland Hotel, Portland, May 27, 1948, and was called to order by Dr. Harold Everett, President. Dinner was served at 6.30 P. M.

Dr. Thomas A. Foster announced the results of his questionnaire concerning those willing to answer emergency night calls. As a result of this questionnaire, there were 20 who signified their willingness to have their names placed with the telephone company office.

Three Deering High School students were awarded prizes as winners of the essay contest sponsored by this society, in conjunction with the American Society of Physicians and Surgeons, on "Why the Private Practice of Medicine Furnishes This Country with the Finest Medical Care." The first prize was awarded to Inga Haugaard, second prize to Joan Ames, and third prize to Sumner E. Moulton. Their essays were forwarded to the National Society of Physicians and Surgeons to be entered in the national contest.

Dr. Stephen A. Cobb, President of the Maine Medical Association, commended the committee on their activity in sponsoring this essay contest.

It was voted that this society make preparations to hold a joint meeting with the York County Medical Society.

The society unanimously approved that the By-Laws of the society be amended by adding to Chapter I of the By-Laws another section to read: "Section 11: A physician retiring from practice after 25 years active membership may, by a two-thirds affirmative vote at a regular meeting, be elected to Associate Membership. Former medical officers of the U. S. Army, Navy, and Public Health Service, who have been retired and are not engaged in medical practice may be elected to Associate Membership in the same manner. Such a member is entitled to attend Society meetings, but shall have no vote and shall not be assessed for dues. Associate membership does not carry any rights to participate in State or National Associations."

The principal speaker of the evening was Dr. Creighton Barker, Executive Secretary of the Connecticut State Medical Society, who spoke on the aims and objects of a county medical society, and very ably presented his subject. He briefly traced the duties of such a secretary, and informed us that during the past year he had visited 12 state societies. He visited the House of Delegates of most of them. He traced his background and qualifications for the job of secretary and described the difficulties. He stated that the two objectives in organized medical groups, as for example, county medical societies, should be a non-selfish, intelligent, self-interest in their own abilities, and secondly, a realization of their public responsibilities. He described the American Medical Association, and the difference between fellowship and membership, and stated that it was the most typical example of a democratic association in existence. The volunteer members of this association were very highly commended by him, as well as the paid membership. He felt, secondly, that the House of Delegates had a fairly large majority of members who were not sufficiently articulate to face the responsibilities they had accepted; he felt it was the fault of the county and state societies in appointing these men as delegates. He felt it was the function of the state medical society to define the policies for the state, and it should have a definite responsibility and position in the state government, especially in an advisory capacity. The state society should inform the state government of its interest in the general medical care. In Connecticut, for example, he stated that there are 32 committees of the state society which are concerned with the health and welfare of the people. He feels that committees are at fault if the government is politically unfavorable to the conditions which exist in medicine. In discussing membership at the county level, he felt that there should be 100% interest in the state medical society. The problem of public relationships is quite difficult to define; if

Continued on page 212

“...such as Metamucil...”*

For the treatment of the spastic colon the author suggests diet, elimination of the nervous element and “bulk producers.” As examples of these he lists “agar-agar, in finely powdered form, in flakes, or in cereal-like form; derivatives of psyllium seed, such as Metamucil”*

METAMUCIL

“SMOOTHAGE”

IN CONSTIPATION

—“encourages elimination by the formation of a soft, plastic, water-retaining gelatinous residue in the lower bowel.”†

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Metamucil is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois.

*Glaske, W. H.: *Spastic Colon*, *M. Clin. North America* 26:805 (May) 1942.

†Council on Pharmacy and Chemistry: *New and Nonofficial Remedies*, 1947, Philadelphia, J. P. Lippincott Company, 1947, p. 320.

TREASURER'S REPORT

To the Officers and Members of the Maine Medical Association:

The books of the Association and JOURNAL were closed and audited as of May 31, 1948, by Jordan and Jordan, Accountants and Auditors, Portland, who "found the same complete and correct in all details of record," and submitted the following statements "properly drawn up to show the true financial position of the Association, May 31, 1948, and the income and expense for the year under review."

FREDERICK R. CARTER, M. D.,
Treasurer.

BALANCE SHEET, MAY 31, 1948

ASSETS	
Cash in Banks	\$30,615.08
Accounts Receivable:—	
Dues	\$1,295.00
Advertising	754.74
	2,049.74
Securities	9,765.00
Furnishings and Equipment	1,092.59
Deferred Expenses:—	
Annual Meeting	\$ 11.27
Medical Advisory Committee	500.00
	541.27
Trust Fund Investments	2,729.78
Total Assets	\$46,793.46

LIABILITIES	
Accounts Payable	\$104.18
Withholding Taxes	226.36
Deferred Income — Convention Exhibit Space	930.00
	1,260.54
Total Liabilities	1,260.54
Assets in Excess of Liabilities	\$45,532.92

CAPITAL AND TRUST FUNDS	
Capital Account	\$42,803.14
Trust Funds	2,729.78
Total Capital and Trust Funds	\$45,532.92

CAPITAL ACCOUNT	
Balance—June 1, 1947	\$38,632.53
Deduct:—	
President's Expenses Prior Period	\$200.00
1947 Dues Receivable Charged Off—	
Not Collected	752.50
	952.50
	\$37,680.03
Add:—	
Revenue in Excess of Expense—One Year	5,123.11
Balance—May 31, 1948	\$42,803.14

TRUST FUNDS AND INVESTMENTS

MAY 31, 1948

Prince A. Morrow Trust:—	
12 shares American Agricultural Chemical Co. (Cost)	\$ 348.00
Canal National Bank — Savings No. 3905	1,202.45
	\$1,550.45
Thayer Library Trust:—	
Canal National Bank — Savings No. 3903	1,179.33
Total Trust Fund Investments	\$2,729.78
Trust Funds:—	
Prince A. Morrow Fund:—	
Principal	\$554.94
Income	995.51
	\$1,550.45
Thayer Library Fund:—	
Principal	\$1,154.20
Income	25.13
	1,179.33
Total Trust Funds	\$2,729.78

STATEMENT OF REVENUE AND EXPENSE

ONE YEAR ENDED MAY 31, 1948

REVENUE	
Dues	\$25,655.00
Income from Investments	490.98
C. M. A. B. Advertising	6,908.23
Local Advertising	810.28
Subscriptions and Sales of JOURNALS	28.20
Exhibit Space Rentals—Convention	1,254.00
Total Revenue	\$35,146.69

EXPENSE	
Secretary and Treasurer's Office:—	
Salary — Secretary, Treasurer and Editor	\$3,000.00
Assistant Secretary	2,500.00
Office Assistance	83.00
President's Expenses	300.00
Secretary and Treasurer's Expenses	428.48
Councilors' Expenses	249.32
Office Expenses:—	
Rent and Lights	372.24

Supplies and Stationery	312.65
Telephone	186.25
Postage and Mailing Expense	265.01
Auditing	95.81
Treasurer's Bond	5.00
Advertising	30.00
Books, Magazines and Periodicals	118.80
New Equipment and Repairs	35.80
Miscellaneous	33.13
A. M. A. Meetings	200.15
Medical Advisory and Special Committees	1,259.24
Annual Meeting	1,208.67
Clinical Sessions	385.63
Council—New England Medical Societies	200.00
Delegates—New England Medical Societies	165.50
50-Year Medals and 5-Year Service Bars	204.60
Roster Reports and Bound JOURNALS	37.90
	<u>\$11,677.18</u>
Printing	\$7,259.20
Plates	189.37
	<u>\$7,448.57</u>
Executive Secretary's Expenses:—	
Salary—Executive Secretary	\$6,500.00
Stenographer	1,745.00
Travel and Convention Expenses	848.64
Delegate—Rural Health Committee	181.85
Office Expenses:—	
Rent and Lights	434.16
Supplies and Stationery	220.62
Telephone	129.01
Postage	30.66
Books	25.00
New Equipment and Repairs	749.13
Dues — Medical Societies Executive Conference	5.00
Miscellaneous	28.76
	<u>\$10,897.83</u>
Total Expenses	<u>\$30,023.58</u>
Revenue in Excess of Expense — One Year	<u>\$5,123.11</u>
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS	
ONE YEAR ENDED MAY 31, 1948	
Cash in Banks—June 1, 1947	\$26,575.23
RECEIPTS	
Received from Dues	\$24,832.50
Income from Investments	490.98
Exhibit Space Rentals	1,613.00
Subscriptions and Sales of JOURNALS	28.20
Advertising	7,704.40
Withholding Taxes	1,535.96
	<u>36,205.04</u>
	<u>\$62,780.27</u>

DISBURSEMENTS	
Secretary and Treasurer's Office:—	
Salaries	\$5,583.00
Traveling and Other Expenses	1,177.80
Office Expenses	1,454.69
A. M. A. Meetings	200.15
Medical Advisory and Special Committees	1,759.24
Annual Meetings	1,233.36
Clinical Sessions	385.63
Council of the New England Medical Societies	200.00
Delegates to the New England Medical Societies	76.72
50-Year Medals and 5-Year Service Bars	204.60
Roster Reports and Bound JOURNALS	37.90
Printing and Plates	7,448.57
Withholding Taxes	1,521.10
	<u>\$21,282.76</u>
Executive Secretary's Office:—	
Salaries	\$8,245.00
Travel and Other Expenses	1,022.09
Office Expenses	1,615.34
	<u>\$10,882.43</u>
	<u>32,165.19</u>
Cash in Banks—May 31, 1948	<u>\$30,615.08</u>
Canal National Bank — Checking Account	
	\$22,347.50
Canal National Bank — Savings Account	1,752.08
Maine Savings Bank	3,035.27
Portland Savings Bank	2,992.50
First National Granite Bank	487.73
	<u>\$30,615.08</u>
SECURITIES	
MAY 31, 1948	
BONDS	
\$2,000 Commonwealth of Australia Ext. Loan 30-yr., 5's, 1957	\$1,960.00
\$3,000 Portland Terminal Company, 1st Mtge. 5's, 1961	3,045.00
\$ 700 Prudence Bond Corp., 1st Mtge. Coll. Series 6, 5½'s, 1936 (Defaulted)	700.00
\$4,000 U. S. Savings Bonds, "G", Due July 1, 1936	4,000.00
STOCKS	
10 Shares Mortbon Corp. of N. Y.	60.00
Total Securities	<u>\$9,765.00</u>

County Society Notes—Continued from page 208

a formula is presented, it should concern the affairs of medicine as a group, rather than individuals. He felt that occasionally the efforts of promotion experts of medicine may be diluted by an unfamiliarity with the finer things in medicine. In conclusion, Dr. Barker stated that medicine is the very best of human endeavor, and demands fine technical skill. The whole of medicine demands skillful approach and handling in relation to the public.

The paper was discussed by Drs. Foster, Cobb, and Leighton.

Preceding this meeting there was a clinic held at the Maine General Hospital.

Respectfully submitted,

JOSEPH E. PORTER, M. D.,
Secretary.

A meeting of the Cumberland County Medical Society was called to order by Dr. Harold Everett at the Mercy Hospital, Portland, at 8.00 P. M. on June 8, 1948.

The application of Dr. William A. Ventimiglia for transfer from the Kennebec County Medical Society was unanimously approved. The applications of Drs. Edward A. MacFarland of Brunswick and Carl D. Sturgis of Pownal, Maine, were unanimously approved for membership in this society.

The principal speaker of the evening was Dr. Frank Dolley of Los Angeles, California. His subject was "The Early Diagnosis and Treatment of Cancer of the Lung." His paper was excellently illustrated by a color moving picture; an interesting picture of the anatomy and surgical technique involved in removing a lung. An interesting discussion followed his paper.

An excellent dinner was served at the hospital at 6.30 P. M. preceding the meeting.

Respectfully submitted,

JOSEPH E. PORTER, M. D.,
Secretary.

Kennebec

A regular meeting of the Kennebec County Medical Association was held at the Augusta General Hospital, Augusta, on May 20, 1948, beginning with a supper at 6.30 P. M.

At 7.30, Dr. Gousse, President, opened the business meeting at the Nurses' Home. At his request, Dr. Shelton opened the discussion of the prepayment plan. After a brief series of comments it was voted that the delegates be instructed to favor the plan at the State meeting.

The transfer of Dr. Ventimiglia to the Cumberland County Medical Society was announced.

At Dr. Gousse's request, Dr. Shelton introduced the speaker of the evening—Dr. George B. Maltby of Portland. His subject "Consideration of the Lumbar, Ruptured, Intervertebral Disc." He discussed the history of the subject—the theory and the pathologic physiology—the history of the development of the procedures—the diagnostic signs—such as a history of pain in the back of the leg, injuries, motor weakness, etc.—the method of examination and the treatment—advocating conservative policies.

The illustrated talk was enjoyed by 29 members and guests. Discussion was followed by adjournment.

Respectfully submitted,

A. H. MORRELL, M. D.,
Secretary.

New Members

Cumberland

Edward A. MacFarland, M. D., Brunswick, Maine.

Carl D. Sturgis, M. D., Pownal, Maine.

William A. Ventimiglia, M. D., 474 Congress Street, Portland, Maine (By transfer from the Kennebec County Medical Society).

Penobscot

Byron Van'leck Whitney, M. D., 156 State Street, Bangor, Maine.

NECROLOGY

Clement S. Wilson, M. D.

1905 - 1948

Clement Scofield Wilson, M. D., of Brunswick, Maine, died April 29, 1948, at the Maine General Hospital, Portland, after an illness of two weeks.

He was born at Portland, Maine, July 31, 1905, the son of Elmer G. and Emma Hamilton Wilson. He attended the Portland schools, graduating from Bowdoin College in 1927, and from Yale Medical School in 1931.

After interning at the New Haven, Connecticut Hospital, and the Mountinside Hospital at Mount Clair, N. J., he began practice in Brunswick in 1932.

He was the co-owner of the Doctors' Hospital in Brunswick from 1940 to 1942, and founded his own hospital when the former institution was dissolved.

He was a member of the American Medical Association, the Maine Medical Association, the Cumberland County Medical Society, and was the first president of the Brunswick Lions Club.

He is survived by his wife, Elizabeth Hawkins Wilson, and three children; Julia D., age 14; Clement S., age 13; and Mary G., age 10.

During his sixteen years of active practice he enjoyed the confidence and respect of the entire community and of his professional associates. His warm-hearted personality and indefatigable energy in the care of the sick will long be remembered.

NEWS AND NOTES

The Central Association of Obstetricians and Gynecologists

The Sixteenth Annual Meeting of the Central Association of Obstetricians and Gynecologists is to take place in Denver, Colorado, on September 23, 24 and 25, 1948.

The Shirley-Savoy Hotel is the Convention Headquarters and the Executive Committee will meet there on Wednesday, September 22, just preceding the Annual Meeting.

JOHN I. BREWER, M. D.,
Secretary-Treasurer,
24 West Ohio St.,
Chicago 10, Illinois.

Veterans Administration Dermatology and Syphilology Section

"The Veterans Administration has in its custody the majority of syphilis records of those Army personnel who were treated for this disease while in active service, and in many instances can procure informative data from the syphilis records of other than Army personnel. It is thought that many physicians treating veterans for syphilis as private patients would find a resume of the syphilis record useful since the details of treatment, results of spinal fluid examinations, and blood serologies are incorporated in the records.

Resumes of these records are available to physicians who are treating such veterans provided authorization for the release of the data is given by the veteran. Requests for the resumes accompanied by an authorization for the release of the data, dated and signed by the veteran, should be addressed to the Dermatology and Syphilology Section, Veterans Administration, Munitions Building, Washington 25, D. C. It is most important that the veteran's Service Serial Number and other identifying information, such as the date of enlistment, the date of discharge, rank, and organization be included.

Ordinarily, the resumes can be furnished in approximately two weeks from the date of the receipt of the request and signed authorization."

Department of Health and Welfare Services for Crippled Children Clinic Schedule — 1948

ORTHOPEDIC CLINICS

Portland — Maine General Hospital, 11.00 a. m.: July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.

Leviston — Cenaral Maine General Hospital, 9.00-11.00 a. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Rumford — Community Hospital, 1.30-3.00 p. m.: Aug. 18, Oct. 20, Dec. 15.

Waterville — Thayer Hospital, 1.30-3.00 p. m.: Aug. 26, Oct. 28, Dec. 23.

Rockland — Knox County Hospital, 1.30-3.00 p. m.: Aug. 19, Nov. 10 (Wednesday).

Machias — Normal School, 1.30-3.00 p. m.: Aug. 11, Oct. 13, Dec. 8.

Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.00-3.00 p. m.: July 7, Sept. 14, Nov. 3.

Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: July 6, Nov. 2.

Fort Kent — Normal School, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Sept. 15.

Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.

Bangor — Eastern Maine General Hospital, 10.00 a. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m. Oct. 27.

By appointment only.

PEDIATRIC CLINICS

Bangor — Eastern Maine General Hospital, 1.30 p. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Waterville — Thayer Hospital, 1.30 p. m.: July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.

Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: July 21, Sept. 22, Nov. 17.

By appointment only.

MENTAL HEALTH CLINICS

The Division of Mental Health conducts monthly clinics for children and adults in the following cities:

Portland — Health and Welfare Office, 178 Middle Street, 1st and 4th Mondays.

Leviston — Out-Patient — Central Maine General Hospital, 3rd Thursday.

Waterville — Out-Patient — Thayer Memorial Hospital, 3rd Friday.

Bangor — Out-Patient — Eastern Maine General Hospital, 1st Wednesday afternoon. Valentine School, Union Street, 1st Thursday.

Function — Consultation, diagnosis and adjustment of habit, behavior, personality and emotional disorders and school problems in children through the age of 17.

Adults — problems in general adjustment and personality.

Types of Difficulties to be Referred:

a. Habit disorders — Feeding problems, lack of bowel control, bed wetting, thumb sucking and nail biting.

b. Conduct disorders — Aggressive behavior, temper tantrums, anger, destructiveness, lying, stealing, truancy, masturbation and sexual perversions.

c. Emotional disorders — Stuttering, tics, fears and anxieties, night terrors, compulsive behavior, hysteria.

d. Psychosomatic disorders — Psychoneuroses (based on physical inferiorities), allergic and gastric disturbances, obesity.

e. School problems — Lack of adjustment to school, placement in grade, failure in one subject only, physical handicaps, day dreaming, inattention, Retardation.

Referral blanks should be sent to the Director, Division of Mental Health, Department of Health and Welfare, Augusta. Patients will be seen by appointment only.

Referrals may be made by any of the Divisions of the Department of Health and Welfare, Department of Education, private social agencies, school superintendents, private physicians and parents.

The Division maintains a traveling clinic which visits the following places at sometime during the year: Caribou and Presque Isle, Houlton, Lincoln, Machias, Old Town, Rockland, Rumford and South Paris.

Venereal Disease Clinics

The Department of Health and Welfare, Bureau of Health, maintains facilities for the diagnosis and treatment of venereal diseases in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford,
Lewiston, Portland, Rockland, Rumford,
Sanford, Waterville, Wilton and Winthrop.

Any physician wishing to refer an indigent person for diagnosis or treatment may obtain the name of the nearest clinic physician by contacting the Department of Health and Welfare, Bureau of Health, State House, Augusta, Maine. If no clinic facilities are available, physicians will be authorized to treat indigent patients in their offices. Authorization should be requested before treatment is started.

Tumor Clinics

Bangor: *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*

Lewiston: *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*

St. Mary's General Hospital
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*

Portland: *Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Joseph E. Porter, M. D.*

Waterville: *Sisters Hospital*
1st and 3rd Thursdays, 10.00 A. M.
Director, *R. L. Chasse, M. D.*

Thayer Hospital
2nd and 4th Thursdays, 10.00 A. M.
Director, *A. H. McQuillan, M. D.*

HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

Clinico-Pathological Exercise—Continued from page 198

On the anterior wall of the heart there was small, white plaque measuring $3.2 \times 1\frac{1}{2}$ cms. There was marked congestion of the pericardium. There was some dilatation of the right auricle, and the tricuspid ring was slightly dilated. The right ventricle was not much enlarged. The left ventricle was slightly thickened. The aortic ring was not dilated. Aortic valves appeared competent. The anterior descending branch of the left coronary artery was almost occluded $3\frac{1}{2}$ cms. from its origin. The circumflex artery was markedly thickened and brittle 2 cms. from its origin. In a person with diabetes one must think of the possibility of atherosclerosis. It is usually present. The lungs both showed adhesions at the apices with fibrous scarring but no evidence of active tuberculosis. There were definite calcified nodules in upper lobe of each lung. The spleen weighed only 82 grams and showed congestion with some increased fibrous tissue. The liver weighed 2047 grams and on section showed a nutmeg appearance. The gall bladder contained a fairly large stone, measuring 1 cm. in diameter and the wall of the gall bladder was thickened. The pancreas showed no gross pathology. The kidneys were large, weighing respectively 269 and 232 grams. The normal weight is around 120 to 150 grams. The cortices were increased in thickness in both kidneys. There was no evidence of any papillitis. The bladder was thickened and the mucosa appeared edematous and congested. The stomach was

smooth and congested. There were two recent ulcerations in the ileum. The brain weighed 1365 grams. It showed no evidence of atrophy, inflammation or hemorrhage. We felt the cause of death was adrenal insufficiency, secondary to the purulent pericarditis. There was no gross scarring of the heart, but there was evidence of heart failure. Microscopic examination of the pericardium showed no evidence of tuberculosis. The kidney lesions were essentially those of tubular damage, consistent with toxic nephrosis. There was no active inflammation in the lungs. There was a chronic cystitis and a chronic cholecystitis. Cultures of the pericardial sac revealed a non-hemolytic staphylococcus aureus.

Dr. Clough's Diagnosis:

Diabetes mellitus with hypoglycemic shock.
Central nervous system syphilis.
? of cardiac tamponade.
? of heavy metal poisoning.

Dr. Wadsworth's Diagnosis:

Diabetes mellitus with acute adrenal insufficiency.
Acute purulent pericarditis (staphylococcus aureus).
Chronic cholecystitis.
Chronic cystitis.
Bilateral toxic nephrosis.
Subacute passive congestion of liver.

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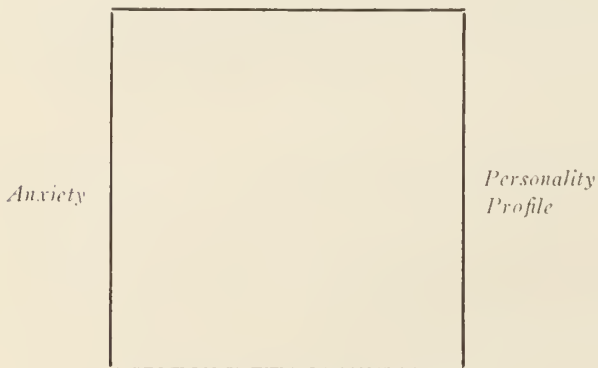
Street

City

The Psychosomatic Patient—Continued from page 193

afraid of something but he doesn't know what, cannot relax to sleep, and over-emotionally loaded dreams wake him up. We know now that this chronic emotional excitement with its physiological effects can produce finally and after existing for a long time organic changes, such as a gastric or duodenal ulcer, malignant hypertension, etc.; and when these organic changes occur, the patient's chances of being helped by psychotherapy are lessened.

What forms these organic changes take are apparently determined to some extent by the personality type or profile of the patient, so that we can draw a square that represents the etiological components acting in a psychomatic disease as follows:

Subconscious Conflicts*Environmental Emotional Stress*

Treatment usually consists of psychotherapy, with discussion of the problems, reeducation, etc.; psycho-

analysis is rarely necessary, because the symptoms are not crystalized or fixed. The less evidence of a psychoneurosis or the more organic the clinical picture appears, the better is the response to psychotherapy unless there are too severe organic changes. The better the patient's adjustment, before the first symptoms appear, the shorter the therapy necessary. If the patient can be shown in the first two or three interviews the relationship between his somatic disorders and his emotional maladjustment, the better the prognosis. The earlier in the psychosomatic disease the psychotherapy is started, the better the prognosis and the better the chance of avoiding organic changes, the reason why the diagnosis should be made early.

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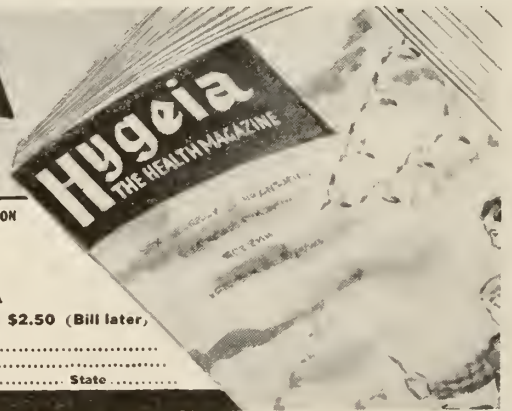
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The Journal of the Maine Medical Association

Volume Thirty-nine

Portland, Maine, August, 1948

No. 8

DIPHTHERIA

THOMAS A. FOSTER, M. D., Portland, Maine

The members of the Pediatric Staff at the Maine General Hospital, after discussing the material available for an article in this issue of *THE JOURNAL*, agreed that the following cases should be selected for publication.

W. W., age 11, was admitted to the hospital on May 16, 1948, with chief complaint of sore throat. Patient complained of a sore throat 3 days before admission. Two days before admission the side of neck began to swell. A cousin had died from throat infection 10 days previously. Local doctor was called, ordered 50,000 units of penicillin every 3 hours, and sulfamerazine, a gramme every 12 hours. A culture from the throat swabbing revealed staphylococcus alba, gram negative diplococcus and spirachetes.

On May 18, 1948, C. W., 6-year-old sister of W. W. was admitted to the Maine General with complaint of sore throat. The throat condition had grown progressively worse and the neck was swollen and painful. A smear taken before admission did not reveal organism suggestive of diphtheria.

The first child was admitted by a house officer, carefully examined, and assigned to the nose and throat service. Prompt and vigorous treatment was instituted with 100,000 units of penicillin every 3 hours and sulfadiazine in approved doses. A smear from throat was examined and diphtheria bacilli, yeast cells and gamma-streptococcus were found. The patient was given 20,000 units of diphtheria

antitoxin intravenously and 20,000 units of antitoxin intramuscularly. On the 4th day following admission the patient seemed improved, but E. K. G. revealed a left bundle branch block, not complete. Nausea and vomiting developed, albuminuria with casts appeared, toxæmia persisted, and death ensued.

The second patient, the younger sister, had a similar course. She was admitted with temperature of 100, as was her brother, but with signs of severe toxæmia, swollen neck and throat described as follows:

"Tonsils are swollen and inflamed almost closing off the posterior pharynx. They are covered with a dark blue exudate. It is not possible to remove this exudate (membrane)." She was given similar doses of diphtheria antitoxin, improved temporarily, developed nausea, vomiting, abdominal tenderness, gallop-rhythm, dilatation of heart, and died.

Here is reported two deaths from diphtheria, a form of diphtheria classified as Malignant (septic diphtheria). The cases came under the direct care of Doctor Alice Whittier, and every member of the House and Attending pediatric staff visited the cases and consulted with Doctor Whittier.

Lethal doses of toxin, however, had entered the vulnerable tissues and medication proved to be of no avail. The autopsies, one on W. W., performed by Doctor William McVane, and the other by Doctor

Continued on page 227

THE OBSTRUCTING PROSTATE

A Brief Review of Work of the Urological Service of the Maine General Hospital for the Year 1947

CLINTON N. PETERS, M. D., Chief of Service

Broadly speaking, the treatment of prostatic obstruction is surgical and there are practically no contraindications to its employment where the amount of residual urine has reached or surpassed two ounces. The purpose of this paper is to lay before the medical profession of Maine the principles upon which the Urological Service of the Maine General Hospital is run; the methods and reasons for the different types of prostatic surgery employed; and the mortality rate and results of a full year's work under our present set-up. In doing this I have included all cases done at the hospital both private and charity, and while I, personally, have had no supervision of the private work of the men of my service, I am confident that they have carried out in their private work the broad basic principles which we have discussed very fully in our conferences, in which their coöperation has been a pleasure to me, and I hope of value to them as a group. Full credit to them personally is hereby acknowledged, and while on the charity side, we have not always seen eye to eye, where decisions have had to be made, I am sure no resentment has been apparent.

Briefly, in late 1946, we were fortunate enough to have a Residency in Urology offered the Service, which I very promptly accepted. As I am accountable only to the Board of Directors, I decided to adopt an entirely different method of using my staff, and abandoned the "months off and months on" idea which had been in use in this hospital from time in memoriam. In its place, I substituted a system where all cases had the same status as private patients, and used my complete staff at all times, with the Resident assigning the cases in rotation. In place of forcing my opinions arbitrarily upon a man in the case of a clash in ideas, if a disagreement arose, I simply re-assigned the case to one of the staff who held that my opinion was most reasonable. In this way, I avoided insisting that any member of my staff do a type of operation contrary to his best judgment. This has rarely been necessary.

In reviewing the work for the year, I find we have refused to operate on no case, and while a few patients, received in a moribund condition, died during their pre-operative treatment from various causes, all cases, regardless of risk, were given the benefit of surgery when their improvement appeared to have reached a "status quo."

The cases were admitted to the hospital in various stages of urinary obstruction, and were immediately checked for residual urine and examined physically. Laboratory tests of complete urine and blood including serology, urea nitrogen, blood sugar and phosphatase were done, and X-ray of chest, spine and pelvis were taken. All cases, if they tolerate a catheter, are so drained until their laboratory findings are normal or fixed. Anything outside the urological field had the benefit of consultation from the various services, whose help in their particular work was invaluable. Anemias were transfused until their counts warranted surgery; heart conditions were Oked by the cardiologists for operation; and diabetics were regulated until it appeared we could operate with the least risk. In short, we feel that pre-operative treatment should not be hastened or abandoned until all efforts to approach normal condition have been exhausted. Time is a variable factor, but barring unforeseen conditions, rarely exceeds three weeks; and we are sure time and effort pay off in a lessened mortality rate.

The greatest care to determine the type of obstruction by rectal examination, cystoscopic examination, introvenous or retrograde pyelogram and cystogram is always observed. But no fixed program is routine, each case calling for one or all of these procedures, until a good workable picture of just what operative technique best adapts itself to the individual case.

The cases were classified pre-operatively as malignant growths or benign hypertrophies. Arrival at a diagnosis of malignancy is based on rectal palpation of the gland, a raised blood phosphatase, which indicates metastatic growth, and areas of metastases, chiefly spine, pelvis or lung, picked up in routine X-ray examination. All cases of known or suspected malignancies were treated with stilbesterol to tolerance pre-operatively; and we hold the opinion that only in this way can the full benefit of the drug be obtained. Our conclusions from its use are that when there is definite tissue obstruction at the bladder neck, surgery is a necessary adjunct. Regarding the indication for castration, we reserve its use for cases who get no benefit from stilbesterol, or who have returned with pain and obstruction after previous treatment and operation. We do not arbitrarily castrate all malignancies. No single operation will fit every case, and in supervising a staff, great con-

sideration should be given the operator's opinion as to his choice of technique. Operative results differ greatly in hands of individuals, and unless there is definite contra-indication, I have rarely been didactic in assigning work to my associates.

It is our considered opinion that malignancy calls for removal by the transurethral method, and in this series there were no cases where total perineal prostatectomy was even discussed. I consider cases warranting total perineal prostatectomy rare. Beside malignancy, transurethral resection has established its place in urology as excellent for median lobe hypertrophy, bladder neck contractures, and small obstructing glands; and for these types it has been effective in our hands. It is a highly technical procedure calling for great judgement in the amount of tissue resected. The removal of too small amount requires repetition of the operation, often several times; and we favor other methods for glands that require multiple resections. The operation is not without danger, and post-operative hemorrhage, bladder rupture, and blood hemolysis, with renal failure due to absorption of water into the circulation, or pyelovenous backflow from ureteral reflux, is not unknown.

The average gland can best be handled by one of the open operative techniques. Controversy as to which is best is not a part of this review, but a word on their drawbacks will not be amiss. Perineal prostatectomy, while perhaps causing less surgical shock than suprapubic, offers operative difficulties and chances of doing damage to surrounding essential tissues, as the rectum and urinary sphincter, with its resultant morbidity of fistulae and incontinence, which somewhat offsets its good points. Suprapubic work, especially the two stage, has earned its place as a conservative, and relatively safe operation, in the hands of many men. Its drawbacks are that one stage work is relatively serious, and shocking to the patient. The two stage, while having the disagreeable repetition of operation, and perhaps a slightly longer hospitalization, has much to commend it. Bleeding can be better controlled, as a period of suprapubic drainage puts the bladder at rest and allows the gland to greatly reduce its passive congestion before removal.

Recently, the retropubic technique has taken the limelight. We have been very successful in adopting this operation, and will continue along this line in conjunction with the older operations, until enough have been done to warrant either our condemnation or praise. Sufficient to say that, as yet, we have not had the difficulty with bleeding, periostitis of the pubic bone, and healing difficulties, reported by others. Operative carefulness, and the use of heavy gauze packs under our retractors, I am hopeful, is the answer. Only further work along this line will tell us.

For the full year 1947, there were done on our Urological Service, both charity and private, 173 prostatectomies. Dr. George L. Temple, my most obliging and efficient Resident, has with great care and accuracy tabulated the following facts:

STATISTICAL ANALYSIS OF PROSTATIC SURGERY FROM JAN. 1, 1947, TO JAN. 1, 1948

TOTAL PROSTATES OPERATED

	No.	%
Transurethrales	104	60.1
Two stage	36	20.8
Perineals	11	6.4
One stage	13	7.5
Retropubics	9	5.2
Total	173	100.0

MORTALITY RATE

Total — 9 deaths — 5.2%

	Deaths	%
Transurethrales	5	4.8
One stage	1	7.7
Two stage	1	2.8
Perineals	1	9.1
Retropubics	1	11.1

CAUSES OF DEATH

Uremia	1
Uremia and sepsis	2
Pulmonary embolus	2
Bronchopneumonia	1
Post-operative hemorrhage	1
Acute coronary thrombosis	1
Pulmonary edema and left ventricular failure	1

AGE DISTRIBUTION

	No.	%
40-50	3	1.7
50-60	14	8.1
60-70	70	40.0
70-80	59	34.1
80-90	23	13.3
90-100	4	2.3
Average age all procedures	70.6 yrs.	
Transurethrales	70.1 yrs.	
Two stage	70.6 yrs.	
Perineals	71.6 yrs.	
One Stage	66.3 yrs.	
Retropubics	70.6 yrs.	

HOSPITAL DAYS

	All Patients	Private Patients
Average all procedures	29.7	25.0
Transurethrales	23.9	20.2
Two stage	40.1	35.0
Perineals	37.3	33.6
One stage	31.3	30.0
Retropubics	27.6	21.5

POST-OPERATIVE DAYS — ALL PATIENTS

Average all procedures	19.3
Transurethrales	15.3
Two stage	19.5
Perineals	27.0
Retropubics	20.9

NON-FATAL COMPLICATIONS FOR ALL PROCEDURES

1. Pulmonary embolus	5
2. Epididymitis	5
3. Post-operative hemorrhage	4
4. Bronchopneumonia	4
5. Wound disruption	4
6. Phlebitis, lower extremities	3
7. Mental confusion	3
8. Rupture of bladder secondary to transurethral	1
9. Abscess abdominal wall and suppurative iliac lymphadenitis	1
10. Cerebral vascular accident	1
Total (18.9%)	31

ASSOCIATED DISEASES

Hypertension and hypertensive heart disease	40
Arteriosclerotic heart disease	36
Diabetes	12
Latent syphilis	4
Cerebral vascular accident and hemiplegia	3
Amaurosis	3
Pernicious anemia	2
Previous abdominal-perineal for carcinoma of rectum	3
Renal calculus	1
Diaphragmatic hernia	1
Marie-Strumpell arthritis	1
Senile psychosis	1
Diverticulosis and diverticulitis	1
Duodenal ulcer	1
Lupus erythematosus	1
Rheumatic heart disease	1

Many of the above were present in one patient. 26.1% had some form of heart disease from mild to severe.

Twelve or 6.9% had mild to severe diabetes.

SUMMARY OF TRANSURETHRALES

PROSTATIC SURGERY PRIOR TO TRANSURETHRAL

Seven had a transurethral 3 months to 10 years previously.

Three had a suprapubic prostatectomy 16 days, 6 years, and 10 years previously.

One had an undetermined type of prostatectomy 9 years previously.

CORRELATION OF CLINICAL DIAGNOSIS WITH MICROSCOPIC DIAGNOSIS

<i>Transurethral Operations</i>	Clinical Diagnosis
BPH	67
Carcinoma of prostate	30
Contracted vesical neck	4
Cord bladder	2
CNS lues	
CVA	
Prostatic calculi	1
Varicosities vesical neck	1
Total	104

Microscopic Diagnoses

BPH	72
Carcinoma of prostate	28
Cord bladder (chr. inflammation of the bladder)	1
Total (no slides on three)	101

Open Operations

BPH	69
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Microscopic Diagnoses

BPH	68
Carcinoma	1

GRAMS TISSUE REMOVED BY TRANSURETHRAL

BPH—average 13.7 grams	
Largest amount 38 grams	
Smallest amount 2 grams	
Carcinoma—average 14.9 grams	
Largest amount 30 grams	
Smallest amount 3 grams	
Average amount of tissue removed by all procedures	30.9 gms.
Average by transurethral	14.2 gms.
Average by open operation	56.5 gms.

RATIO OF PRIVATE TO SERVICE TRANSURETHRALES

Private	72	69.2%
Service	32	30.8%

Three of the transurethrales had had abdominal-perineal resections previously for carcinoma of the rectum.

In commenting on this analysis several features are pertinent and worthy of mention. First, the series is not sufficiently large to warrant drawing any specific conclusions regarding the adoption of any one surgical procedure as superior, or discarding any operation as hazardous. The average age for all patients of 70.6 years, represents the oldest group calling for radical surgery in the general hospital set-up, and it is not out of reason to expect a greater mortality rate than that of other types of surgery. While 5.2% mortality is not an outstanding accomplishment, it compares favorably with this type of work done elsewhere. That individuals of this age are not good surgical risks is very evident by glancing at the table of associated diseases which shows 26.1% had cardiac complications, and 6.9% were diabetics. Better than 50% had some difficulty aside from their immediate prostatic involvement.

Non-fatal post-operative complications comprising 18.9% is too high, and with more care should be reduced to at least 10%. Certain conditions at present as embolus, phlebitis, and pneumonia offer possibilities, and much is being done to eliminate them. Operative accidents, as bladder rupture and post-operative hemorrhage, should not occur theoretically, although I have never seen a Urologist who was fortunate enough to do any work without having these surgical headaches. Perhaps one exists.

In commenting on the various surgical procedures it is of interest that 60% were done by transurethral resection. Thirty of the 104 cases were carcinoma, although two were not proven by pathological examination, which is not conclusive, as resection biopsy does not offer the best tissue for section. This follows closely in percentage a review of three hundred cases which I published some years ago calling attention to the relatively large number of prostatic carcinomas encountered. Our handling of these cases at present is one of the great advances in urology. Stil-

besterol, castration and resection have added much to the comfort of man. I would expect in the future to see a decline in the number of adenomas operated by this method. A glance at the comparison of amount of tissue removed by open operation and by resection is pretty conclusive evidence that at best, especially in the earlier age group, it is but a temporary expedient and not radical enough.

While the number of radical operations is not nearly large enough to draw positive conclusions, it is interesting to note that the two stage suprapubic had $\frac{1}{3}$ the death rate of the other operations, of which, when added together, they nearly equalled in number. Although it is a little more trying on the patient and requires longer hospitalization, in my opinion it is not yet worthy of discard.

In looking over these tables, I was favorably impressed with the hospital days which show great improvement. I was disturbed by the fact that our service patients required about 20% longer than private patients, which is a drain on hospital resources at a time when resources are particularly prominent by their absence. I at once traced down the cause and found it apparently due to the fact that many charity patients have no place to be taken care of when they are able to leave the hospital. Therefore, a serious lag is encountered, and until some place for handling cases of this type in convalescent homes is brought forward, they will continue to occupy a potential surgical bed.

In conclusion:

The prostatic surgery at the Maine General Hospital for the year 1947 has been accurately reviewed.

The private patient method of handling ward work, where a relatively small staff is involved, has been a great improvement over previous methods.

The mortality rate is consistent with good urology.

Certain comments and comparisons are warranted but the number of cases is too few and a one-year period too short to draw conclusions.

If the head of a family is stricken with tuberculosis the family's resources are exhausted in about one year. After that society takes care of the victim and his dependent children, and after his death gives his widow a pension. The expenditure in taking care of the results of the disease far exceed the money spent for its eradication.—James H. Hutton, M. D., *Illinois M. J.*, Apr., 1947.

A diabetic patient beginning to show unusual features, and particularly to our experience recurrent colds, or persistent head colds, should be submitted to X-ray examination of the chest; a search for tubercle bacillus in sputum and fasting-stomach contents should be made, and the blood sedimentation rate ascertained.—W. R. Gauld, M. D., and A. Lyall, M. D., *Brit. M. J.*, May 17, 1947

THE SURGICAL DIABETIC*

A Medical Analysis of a Third Series of 100 Operated Surgical Diabetics

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In August, 1938, in an article, "Mortality in Surgical Diabetes in the General Hospital,"¹ a medical study of 100 operated cases was reported from the Maine General Hospital. This was followed three years later with a second report, "A Medical Analysis of a Second Series of 100 Operated Surgical Diabetics."² From this period in 1941 an analysis of a third series was begun but a short time later war broke out and this interrupted the compiling of any further data. The third group now presented in this paper covers the periods from mid-summer 1941 to mid-summer 1942 and from about the beginning of 1946 to 1948. This includes both private and service patients treated by the writer during these periods. They are not arranged chronologically, however, in the group analysis.

In the two previous articles, attention was called to the possibility of an unavoidable higher mortality rate in the general hospital as compared to the special clinic. This was attributed in part to the sharing of responsibility among a larger number of physicians and surgeons, but more especially to the condition of the patient at the time of his arrival at the hospital. It was pointed out that service patients often represent more than 50% of the surgical diabetics in the general hospital, they are poorer operative risks than private patients due to inadequate food intake and many of them living in the country several miles from a physician, do not call for medical aid until they are acutely ill. This predisposes to a higher mortality rate, especially noticeable when dealing with acute abdominal emergencies and lesions involving the lower extremities.

Despite the gradual decline in mortality rate, there are relatively few reports in the literature on the surgical diabetic and they range for 2.2% to 25%. The lower figure was reported from Joslin's Clinic³ and is a goal which we should all keep in mind even though we may not reach it in the general hospital having large public wards.

There are several contributing factors toward early recovery in the surgical diabetic. One of the most important is probably diet. The tissues of the uncontrolled diabetic have a low resistance due to loss of protein, carbohydrate and vitamins. He is in an older age group as will be noted in the analysis in this paper where the average age was 61.8 years. Even the patient with mild diabetes may be in a state of

undernutrition due to inability to purchase sufficient food or many times due to a poor appetite and diarrhea associated with achlorhydria. Many of the service patients are suffering from avitaminosis and chronic skin infections which predispose to frequent and extensive bedsores. Hypochromic anemia is not an uncommon finding in this group of patients. Therefore, the first step in preparation for surgery is a well balanced easily digestible diet supplemented with sufficient insulin to control the diabetes. If the patient is unable to tolerate an adequate diet, one of the protein hydrolysates intravenously and blood transfusions are extremely helpful. Vitamins, especially vitamin B complex and ascorbic acid, seem to favor early healing and should be used if the patient is unable to take sufficient food. One sometimes sees patients who on account of mental deterioration flatly refuse to try to eat. In such instances, tube feeding must be resorted to and this method works especially well with the tube in the duodenum. Adequate calories, vitamin solutions and even salt and water can then be administered in sufficient amounts. When Wangenstein drainage is necessary, one must depend almost wholly on intravenous feedings. Fortunately this is usually of only brief duration.

The importance of salt and water balance should not be overlooked. In the severe uncontrolled diabetic, dehydration is always present and such patients are extremely poor surgical risks until the electrolyte balance is restored. On the other hand, however, as soon as the diabetes is controlled this can be quickly overdone with resulting edema. Scientific calculation for determining electrolyte balance is undoubtedly useful in expert hands but a careful physical examination will usually give sufficient information. Inasmuch as the majority of surgical diabetics are of the age where generalized arteriosclerosis is common, it is not surprising that an associated heart disease is frequently encountered. Various forms of heart disease with or without congestive failure is often present. Digitalization is indicated in the event of failure. The use of mercurial diuretics is necessary if digitalis fails to take care of cardiac edema. Paroxysmal tachycardia calls for a trial with quinidine sulphate in cautious doses. Patients with heart disease and failure or with a history of previous cardiac edema are a major complication especially from the standpoint of salt and water intake. It should be remembered that one liter of normal saline solution contains nine grams of salt which is the normal daily require-

*From the Medical Service.

ment of salt in health. Less than this amount of sodium salt is indicated while cardiac edema is present. However, a moderate fluid intake with low sodium salt content is permissible. Perhaps one word of caution in diagnosis should be interjected here in the consideration of edema especially in elderly patients. The edema which on the first examination may appear to be of cardiac origin may actually be due to avitaminosis and often associated with low serum albumin. The total blood protein with serum albumin and serum globulin ratio should be done on all questionable cases. A high protein and high vitamin diet rather than the conventional therapy for cardiac failure may be the answer to an obstinate edema.

Amputations for gangrene of the lower extremities have until very recently resulted in a high mortality rate, ranging from 25% to 40%. Thanks to better preoperative preparation of the patient, antibiotics and the more frequent use of transmetatarsal amputation there has been a definite reduction in mortality if one can form an opinion from the few available reports. Again Joslin's Clinic is setting the goal with 3.7% mortality in the period from 1942 to 1946. In the first series published from the Maine General Hospital in 1938, the mortality rate from amputations was 24%, in the second series from 1938 to 1941 it was 10% and in the present series there was only one death in twenty amputations (5%).

The same rules should be observed in preparation of the patient for amputations as for other types of surgery. No longer should death result from staphylococcus and streptococcus septicemia; antibiotic therapy has largely been responsible for this improvement. Refrigeration as first advocated by Dr. F. M. Allen⁴ may be a life saving procedure in selected cases. This produces a marked inhibition of absorption of toxic products. The limb can be packed in ice from one to five days if necessary and the patient who was a poor risk initially will become a much better risk both physically and mentally.

Any discussion of the prevention and treatment of lesions of the lower extremities would be incomplete without including the help given us by the neurosurgeon. If drug therapy fails to produce sufficient vasodilatation, sympathectomy is worth trying in some instances. Not only will lumbar sympathectomy sometimes render much comfort to the patient suffering from excruciating pain due to arteriosclerosis of the lower extremity but in a small percentage of cases gangrenous areas will actually heal resulting in a useful limb. This has happened in three such patients following lumbar sympathectomy in the Maine General Hospital during the past year. Furthermore, if amputation is inevitable lumbar sympathectomy may make it possible to successfully do a lower leg or even a transmetatarsal amputation rather than ampu-

tate at the mid-thigh and a natural joint is always preferable to an artificial one.

Lastly, but not the least in importance in diabetic surgery, is the present day custom of keeping the patient out of bed at all times as much as possible. This is just as necessary before surgery as it is after the operation has been performed. The surgeons have taught us a great deal in this respect and it is beyond doubt one of the most important contributing factors to the low mortality rate in all types of surgery. The frequent pulmonary complications of a decade ago in the surgical patient now belongs to the past.

In this "Third Series of 100 Operated Surgical Diabetics," the average age was 61.8 years and the average daily insulin requirement was 39.6 units. Those patients in whom the diabetes was not severe enough to require insulin were not included in this study. There were four deaths in all as compared to eight deaths in the second series (1941) and sixteen deaths in the first series (1938). Among the deaths in this third series was a woman of 72 who was operated upon for an acute gangrenous gallbladder. She had arteriosclerotic heart disease with auricular fibrillation and was well controlled with digitalis at the time of surgery. In spite of this, she rather promptly went into pulmonary edema from which she did not recover. A postmortem was not obtained but it was believed that she had a pulmonary infarct as she complained of a severe right side chest pain and became very cyanotic just before she expired. The second patient was a woman, aged 64, who entered the hospital disoriented due to cerebral arteriosclerosis. The mental condition did not improve in spite of continuous tube feedings supplemented with vitamins and control of the diabetes. On admission to the hospital there were numerous areas of gangrene on her back and a moist gangrene of the right foot but at no time was there an elevation of temperature. She was given continuous antibiotic therapy and at the end of ten days a mid-thigh amputation was performed. There was no evidence of shock following surgery but the patient gradually failed and died six weeks later from senility and extensive areas of skin gangrene. The third death resulted from cerebral apoplexy in a man of 59 six days after a hip nailing. He had a cerebral accident and died within a few hours. The fourth and last death in this series was in a man of 70 who died from uremia following a transurethral prostatectomy. After a long period of drainage, he still remained a poor operative risk but surgery seemed the only possible relief. It was quite evident that surgery was not the actual cause of death.

The general program of preoperative treatment in the surgical diabetic has already been outlined in this

Patient		Operation	Insulin Units Average Each 24 Hrs.	Complications	Anesthetic	Antibiotics	Lived	Died: Cause Of
No.	Age							
1	54	Dilatation of Urethra	10	0	Spinal	Sulfadiazine	+	
2	68	Amputation (Mid-Thigh)	45	0	Spinal	0	+	
3	62	Fulguration of Bladder	32	0	Spinal	Sulfadiazine	+	
4	34	Incision of Abscess	22	0	Local	Sulfadiazine	+	
5	76	Incision of Abscess	53	0	Nitrous Oxide	Sulfadiazine	+	
6	57	Venous Ligation	20	0	Spinal	0	+	
7	77	Trans-Urethral Prostatectomy	40	0	Spinal	Sulfadiazine	+	
8	70	Reduction of Fracture	30	0	Nitrous Oxide	0	+	
9	63	Amputation (Mid-Thigh)	117	0	Nitrous Oxide	0	+	
10	59	Amputation (Mid-Thigh)	90	0	Spinal	0	+	
11	67	Hysterectomy	50	0	Nitrous Oxide and Ether	0	+	
12	72	Intestinal Resection with Colostomy	10	0	Ether	0	+	
13	51	Cholecystectomy	25	0	Ether	0	+	
14	22	Resection of Gangrene of Abd. Wall	100	0	0	Sulfadiazine	+	
15	69	Cholecystectomy	58	0	Ether	0	+	
16	72	Drainage of Gallbladder	90	A. S. Heart Disease, Aura Fibrillation with Con. Failure	Local	0		+ Congestive Failure
17	74	Amputation (Mid-Thigh)	70	Senile Dementia Multiple Areas Skin Gangrene	Spinal	Penicillin		+ Senile Dementia
18	58	Amputation (Mid-Lower Leg)	15	0	Spinal	0	+	
19	67	Incision of Abscess	48	0	Spinal	0	+	
20	30	Incision of Abscess	60	0	Nitrous Oxide	0	+	
21	42	Removal of Teeth	22	0	Cobetrin	0	+	
22	52	Resection of Gangrene of Abd. Wall	90	0*	Spinal	Penicillin	+	
23	67	Incision of Abscess	25	0	Spinal	Penicillin	+	
24	57	Wiring of Tibia and Fibula	25	0	Local	0	+	
25	58	Cholecystectomy	30	0	Ether	0	+	
26	31	(Obstetric) Normal Delivery	35	0	Ether	0	+	
27	37	Caesarean Section	15	0	Ether	0	+	
28	25	Caesarean Section	25	0	Ether	0	+	
29	74	Prostatectomy (2nd Stage)	20	0	Spinal	0	+	
30	60	Toe Amputation	50	0	Spinal	Sulfadiazine	+	
31	62	Amputation (Mid-Thigh)	55	0	Spinal	Sulfadiazine	+	
32	65	D and C and Radium	25	0	Sod. Pentothal	Penicillin	+	
33	66	Prostatectomy (2nd Stage)	15	0	Spinal	0	+	
34	64	Cholecystectomy	10	0	Ether	0	+	

Patient		Operation	Insulin Units Average Each 24 Hrs.	Complications	Anesthetic	Antibiotics	Lived	Died: Cause Of
No.	Age							
35	78	Hip Nailing	50	Cerebral A. S. and Malnutrition	Ether	0		+ Cerebral Apoplexy 6 Days Later
36	59	Amputation (Mid-Thigh)	40	0	Spinal	0	+	
37	58	Stitching Multiple Lacerations	50	0	Nitrous Oxide	0	+	
38	66	Herniotomy	18	0	Spinal	0	+	
39	69	Dilatation of Urethra	28	0	Spinal	0	+	
40	48	Appendectomy	38	0	Spinal	0	+	
41	89	Hip Nailing	20	0	Spinal	0	+	
42	63	Trans-Urethral Prostatectomy	35	0	Spinal	0	+	
43	65	Reduction Fracture of Ankle	40	0	Sod. Pentothal	0	+	
44	67	Reduction Fracture of Femur	55	0	Spinal	0	+	
45	68	Toe Amputation	68	0	Spinal	0	+	
46	58	Trans-Urethral Prostatectomy	60	0	Spinal	0	+	
47	77	Prostatectomy	55	0	Spinal	0	+	
48	61	Mastectomy (Radical)	47	0	Ether	0	+	
49	51	Reduction Fracture of Wrist	30	0	Sod. Pentothal	0	+	
50	48	Incision of Abscess	60	0	Sod. Pentothal	0	+	
51	69	Herniotomy	37	0	Spinal	0	+	
52	63	Mastectomy (Radical)	35	0	Ether	0	+	
53	68	Laporotomy	35	0	Spinal	Penicillin	+	
54	54	Venous Ligation	50	0	Spinal	0	+	
55	42	Tonsillectomy	40	0	Local	0	+	
56	22	Caesarean	50	0	Nitrous Oxide and Ether	0	+	
57	70	Sympathectomy for A. S. of Leg	10	Hypertension	Ether	0	+	
58	68	Perineal Prostatectomy	60	0	Spinal	0	+	
59	46	Amputation (Mid-Thigh)	20	0	Spinal	Penicillin	+	
60	58	Toe Amputation	40	0	Spinal	0	+	
61	71	Amputation (Mid-Thigh)	50	0	Spinal	0	+	
62	74	Sympathectomy for Gangrene of Foot	10	0	Ether	Penicillin	+	
63	64	Amputation (Mid-Thigh)	45	0	Spinal	Penicillin	+	
64	68	Excision Tumour of Face	60	0	Sod. Pentothal	0	+	
65	74	Double Antrum Window	22	0	Local	0	+	
66	75	Trans-Urethral Prostatectomy	15	0	Spinal	0	+	
67	71	Hysterectomy	17	0	Ether	0	+	
68	60	Repair of Tendon	22	0	Ether	0	+	
69	74	Prostatectomy (2nd Stage)	26	0	Spinal	0	+	
70	74	D and C	34	0	Sod. Pentothal	0	+	
71	58	Sympathectomy for A. S. of Leg	47	0	Ether	0	+	

Patient		Operation	Insulin Units Average Each 24 Hrs.	Complications	Anesthetic	Antibiotics	Lived	Died: Cause Of
No.	Age							
72	71	Amputation (Mid-Thigh)	50	0	Spinal	Penicillin	+	
73	53	Cholecystectomy	30	0	Ether	0	+	
74	58	Cholecystectomy	30	0	Ether	0	+	
75	70	Trans-Urethral Prostatectomy	12	0	Spinal	0		Uremia
76	70	Colostomy	15	Ca. of Colon Ch. Nephritis with Uremia	Spinal	0	+	
77	72	Toe Amputation	25	0	Nitrous Oxide and Ether	0	+	
78	74	D and C	10	0	Nitrous Oxide and Ether	0	+	
79	75	Toe Amputation	30	0	Spinal	0	+	
80	51	Incision and Drainage of Carbuncle	50	0	Local	Penicillin	+	
81	68	Multiple Toe Amputation	25	0	Spinal	Penicillin	+	
82	56	Cholecystectomy	15	0	Ether	Penicillin	+	
83	30	Incision of Abscess	100	0	Sod. Pentothal	0	+	
84	78	Trans-Urethral Prostatectomy	20	0	Spinal	Sulfadiazine	+	
85	54	Hysterectomy	60	0	Ether	0	+	
86	64	Sympathectomy for Hypertension	50	0	Ether	0	+	
87	74	Sympathectomy for A. S. of Leg	18	0	Ether	Penicillin	+	
88	72	Sympathectomy for A. S. of Leg	34	0	Ether	Penicillin	+	
89	70	Repair of Cystocele	15	0	Ether	0	+	
90	60	Cholecystectomy	18	0	Ether	0	+	
91	72	Mastectomy (Radical)	30	Coronary Thrombosis	Ether	0	+	
92	60	Incision of Infected Foot	80	0	Spinal	Penicillin	+	
93	72	Amputation (Mid-Leg)	39	0	Spinal	Penicillin	+	
94	74	Toe Amputation	14	0	Spinal	Penicillin	+	
95	24	Excision of Scar	100	0	Nitrous Oxide	0	+	
96	60	Incision of Carbuncle	40	0	Nitrous Oxide	Penicillin	+	
97	68	Herniotomy	18	0	Ether	0	+	
98	60	Incision of Abscess	45	0	Sod. Pentothal	Penicillin	+	
99	75	Wiring of Hip	25	0	Ether	0	+	
100	60	Toe Amputation	34	0	Spinal	Penicillin	+	

paper. In an acute surgical emergency, haste is frequently essential and much treatment has to be carried out within a short preoperative period. Any diabetic patient who is suffering from shock as the result of acidosis, or perhaps from any other cause, should not be operated upon immediately. It is interesting to observe, however, how quickly the abnormal metabolism can be brought under control with frequent insulin administrations, sufficient fluids and blood transfusions. Immediately following surgery, the twenty-four hour fluid intake should be at least 3000cc unless contra-indicated, the daily carbohydrate content of the diet should usually be given intravenously and covered by sufficient insulin to at least prevent dehydration and acidosis. Within a short time, a soft diet will be tolerated and more attention then given to stricter control of the diabetes.

SUMMARY AND CONCLUSIONS

The medical management and results of treatment in "A Third Series of 100 Operated Surgical Diabetics" are discussed. The mortality rate was 4% in a group of patients whose average age was 61.8 years and whose average daily requirement of insulin was 39.6 units.

In conclusion, it can be said that the following factors are contributory to the present decline in mortality rate in the surgical diabetic: a better general understanding of the diabetic problem by both physician and patient, the early treatment of complications, the use of antibiotics, the restriction to bed as little as possible both before and after surgery, neurosurgery when indicated, the use of refrigeration in selected cases and recognition of the importance of salt and water balance and proper dietary management supplemented with blood transfusions when necessary. Vascular accidents which inevitably occur in patients of an older age group will, in spite of careful management, result in a minimal mortality rate when dealing with the surgical diabetic.

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Diphtheria—Continued from page 217

Edward Soule of the Pathological Department, showed myocarditis, toxic, with mural thrombi of left ventricle as part of the anatomical diagnoses.

The staff felt that presentation of these cases would call attention to some conditions which need attention.

1. Encouragement for an aggressive program of immunization against diphtheria. (These patients had not been immunized.)

2. Careful clinical evaluation of sore throats with exudate. Don't forget diphtheria.

3. Early administration of Diphtheria Antitoxin in cases of sore throat if diagnoses is in doubt.

4. Repeated examination of repeated throat smears in suspicious cases.

The office of the Board of Health in Portland, reports that no deaths from diphtheria occurred in Portland in 1946, 1947, and none in 1948 until these two children were admitted from outside Cumberland County. Indeed, there has not been a case of diphtheria reported this year in Portland until these 2 cases were reported. This absence of diphtheria cases and diphtheria deaths in Portland is due in a large measure, we believe, to the aggressive campaign of immunization.

Drs. Thomas A. Foster, Lloyd W. Bishop, Alice A. S. Whittier, Philip G. Good, Ralph Heifetz.

It is well known that the incidence and severity of illness are greater among the urban poor than among the more prosperous groups. Ignorance is a factor in promoting high sickness rates, but ignorance is in part a result of poverty.—*Medicine in the Changing Order*, Rep. New York Academy Med. Comm., The Commonwealth Fund, 1947.

The curious thing is that legislators—and for that matter people generally—seem to feel that tuberculosis is someone else's disease and is paid for by the victim and his family. The idea is completely wrong. Tuberculosis has to be paid for by society. The only choice is how the bill will be paid.—James H. Hutton, M. D., *Illinois M. J.*, Apr., 1947.

LOWER BOWEL CANCER

An Appeal for Rectal Examination Before Medication

ISAAC M. WEBBER, M. D., Portland, Maine

Mankind is more at the mercy of his fellow-beings for the early detection of cancer of the terminal large bowel than for accessible malignancy of those parts of the body more constantly exposed. Everyone is aware that the cervical arrangement of man differs so greatly from that of the ostrich, that cancer of the anorectal tissues must of necessity escape the eye of its possessor. As a matter of fact, in medical practice rectal cancer is not seen by the physician himself many times until the process is rather far advanced. This situation arises primarily because we are unaccustomed to place the proper emphasis on the importance of an adequate rectal examination for patients who seek our assistance because of diarrhea or some other equally unalarming manifestation, referable to the bowel, before we proceed to give what so often proves to be ill-timed therapeutic advice.

As a matter of fact, any aspect of malignant disease cannot be taken too seriously. Cancer involving the terminal end of the large bowel is no exception. According to my own experience and the current literature, cancer in this location is being neither diagnosed nor subjected to operative therapy earlier than it was ten or fifteen years ago.

At this point, a pertinent question might be asked as to just what comprises the early symptoms of large bowel malignancy. And the answer is that there are none. In large bowel cancer, it is only the complication incident to the tumorous process that signals the presence of danger. When the tumor becomes sufficiently ulcerated, it may manifest itself by gross bleeding, by bloody mucus in the stool, or by occult blood loss as indicated, at times, by an otherwise unexplained anemia. When the cancer becomes sufficiently large and infected, it may produce enough irritation to promote frequent stools and, in some cases, diarrhea. Narrowing of the bowel, incident to a carcinomatous process, can and does produce constipation with or without local or general abdominal discomfort. Thus, when cancer is present, a little blood in the stool, a change in bowel habits, anemia, regional discomfort, or abdominal pain are the manifestations not of an early process but of well-established cancer.

To restate: (1) a little blood in the stool; (2) increased constipation; (3) frequent stools, and (4) regional discomfort or abdominal pain are recognized signs and symptoms of malignancy of the large bowel. However, these almost identical signs and symptoms are so commonly present in the more

prevalent benign disorders, such as piles, fissure, colitis, or even in diarrhea, which to many is an entity in itself, that persons so afflicted are apt to assume that they are suffering from one of these more common ailments. Because of this mistaken impression, such persons often seek relief from these indications by employing self-medication for months or, not infrequently, use salves and medicines obtained from physicians without ever having had the benefit of a digital or proctoscopic examination. These facts cannot be stressed too strongly, for experience teaches that for years over 25 per cent of patients with cancer of the rectum have been receiving treatment directed toward various conditions other than an unrecognized cancer of the rectum. Even operative therapy, hemorrhoidectomy in fact, is not uncommonly employed for anal varicosities that may accompany malignancy of the lower large bowel.

This is a sad commentary in view of the fact that with very little effort every such lesion can be seen and felt and, therefore, diagnosed at a sufficiently early period to make operative therapy much more satisfactory than at present in a vastly higher percentage of such cases. It is even occasionally considered by some surgeons quite possible to avoid sacrificing the function of the rectal sphincter, provided the case is not too far advanced.

Now, what has been accomplished for the patient suffering from moderately well-advanced cancer of the lower bowel? This is not always easy to determine. The length of life of the patient, his comfort, and the peace of mind and financial well-being of his family are the only measures of comparison between treatment and non-treatment. Obviously, the last two factors cannot be reduced to figures, but you may remember that Daland, Welch and Nathanson in 1935 reported the natural history of the disease in 100 untreated patients with rectal cancer. Their findings were as follows: (1) the median length of life from onset of symptoms to death was 14 months; (2) approximately three-fourths of all patients were dead within 2 years, and (3) a single patient lingered 49 months in utter misery.

While collecting these data on untreated cancer, they also compiled pertinent facts on 42 rectal cancers subjected to radical resection in 19 different hospitals, 10 of which were in Boston, with the following results: (1) the average length of the period from onset of symptoms to resection was 8.7 months; (2) the operative mortality was 26 percent, and (3) ex-

cluding operative deaths, there were 41 per cent five-year survivals.

A comparison of interest may be made between the end results in the 100 untreated cancers of the rectum, as reported above, and the survival rate in 100 cancers of the lower large bowel consecutively treated in our local hospitals. Of these 100 patients with large bowel cancer, only 85 were considered suitable subjects for radical resection, as the disease in the remaining 15 patients had extended beyond the limits of any operative maneuver immediately compatible with life. On the other hand, complications such as extension of the disease to contact tissues or organs when they could be removed en bloc, metastasis to the liver, or advanced age of the patient were not considered contra-indications to radical operation. The data resulting from the study are listed below: (1) 77 patients survived resection; (2) 36 patients survived less than 5 years with death due presumably to cancer; (3) 5 patients died more than 5 years after operation, the majority of malignant disease; (4) 16 patients lived 5 to 10 years after operation, and (5) among the cancers resected within the last 5 years, 16 patients still survive.

Of the first 50 cases enumerated above, 40 patients had resections with 8 hospital fatalities, or 20 per cent. Of the second 50 cases, 45 patients underwent resection without fatality. The five-year survival rate to June 9, 1948, excluding hospital deaths, was 25 cases, or 32.46 percent. A sufficient number of those 16 patients, still living less than 5 years after operation, may survive long enough to bring the five-year survival rate nearer to the 50 per cent mark, a figure which compares not unfavorably with the reported experiences of other surgeons. These data may be summarized as follows:

RECTAL AND RECTOSIGMOID CANCERS	
Non-resectable (colostomy, 14; fulguration, 1)	15
Radical resections	85
Survived resection	77
Died in hospital	8
Lost to follow-up	0
Died less than 5 years after operation	36
Died 5 or more years after operation	5
Living less than 5 years after operation	16

The diagnosis of pulmonary tuberculosis is simple and uncomplicated only if adequate positive data is readily obtained. The patient with obviously extensive chest film findings and sputum positive for tubercle bacilli presents no diagnostic problem. At

Living 5 to 10 years after operation	16
Living 10 or more years	4
Total Cases	100

In closing, I think that the following facts should be re-emphasized: first, practically speaking, 50 per cent of all cancer involving the large bowel can be detected by a digital examination of the anus and rectum without the aid of X-ray; and second, an additional 20 per cent can be seen with the aid of a proctosigmoidoscope. Thus, 70 per cent of all cancer of the large bowel is accessible to the special senses of sight or touch. There is nothing mysterious, subtle, or involved about making the diagnosis. It is merely a matter of educating the layman to report for advice when disorders appear that are not unlike those of piles, fissure, colitis, or diarrhea; and of educating ourselves to perform a proper examination before treatment is advised or initiated.

Therefore, let it be determined that we place neither faith, hope, nor charity in prescribing placeboes, pastes, or pills without first giving the patient the benefit of an honest digital and proctosigmoidoscopic examination, for hopeless rectal cancer not infrequently exists and yet escapes detection by the more elaborate and conventional barium-enema X-ray study.

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that stage, with probable far advanced disease, he presents no therapeutic problem—the pulmonary disease is far advanced — the prognosis guarded. — Rubin H, Kaplan, M. D., and Louis Levin, M. D., *J. Missouri M. A.*, Jan., 1948.

COMMON DISEASES OF THE CERVIX AND THE EARLY DIAGNOSIS OF CANCER OF THE CERVIX*

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Your program committee has asked me to speak this morning for twenty minutes on office gynecology. It is obvious that a subject of such proportion cannot be treated in this short time. I have, therefore, taken the liberty to confine myself to the cervix and its more common disease.

The cervix is the most common site of disease in the female, and also the most potentially dangerous. In order to treat diseases of the cervix intelligently, it is necessary that a clear understanding of the anatomy, cytology, and pathology be fully appreciated. The average cervix is about one inch in length. It is limited distally by the external os and proximally by the internal os. The cervix is chiefly a muscular organ, being capable of tremendous stretching, and contains glands which secrete a tenacious mucous, which is chiefly used to lubricate the birth canal. The muscular layer of the cervix contains a large amount of connective tissue, which makes the cervix feel firmer than the rest of the uterus. The external os is approximately 5 mm. in diameter and is covered with stratified epithelium. Following pregnancy, instrumentation, or disease, the os may be distorted or enlarged. The internal os is about 1 mm. in diameter and rarely changes its shape. The cervical canal is lined by a mucous membrane which is about 1 mm. in thickness and presents a longitudinal ridge on its anterior and posterior surfaces, from which large numbers of folds branch off obliquely and laterally connecting these two ridges. Because of these numerous folds, the actual surface area of the endocervix is tremendously increased, presenting an extensive surface which is susceptible to infection. The epithelial lining at the internal os is of the cuboidal variety. As the external os is approached, this epithelium becomes a high columnar ciliated type, and at the external os this high columnar epithelium gradually changes to a stratified epithelium. There is a definite basement membrane below the entire epithelium. Scattered throughout the mucous membrane are many simple tubular and racemous glands averaging about two mm. in length. The function of these glands is to secrete mucous into the cervical canal through the small ducts which open into this canal. The glands usually stop at the basement membrane, though some extend beyond this structure to a depth of about three mm., or about $\frac{1}{8}$ of an inch. Approaching the internal os, the glands become fewer and more shallow. For this reason, infection

rarely originates in this area. Infections of the cervix may ascend into the uterus, fallopian tubes, ovaries, and parametrial tissues. The extent and rugosity of the cervical mucosa afford innumerable recesses for pathogenic organisms, while the traumatised and lacerated cervix is an open door to infection. When infection of the cervix takes place, the mucosa becomes swollen, edematous and everted. The earliest stage of cervical infection is represented by an infiltrated area, denuded of squamous epithelium — the result of necrosis and maceration of the surface layer. The columnar epithelium, under constant irritation by the infection, pushes itself out onto the vaginal aspect of the cervical rim, replacing the stratified epithelium, and producing the so-called erosion. This persistent congestion produces a hypersecretion of mucous from the infected glands and ultimately a hypertrophy and hyperplasia of the cervical connective tissue. Eventually the ducts of the cervical glands become occluded, resulting in subsequent cyst formation, commonly known as Nabothian cysts. This cystic condition increases the bulk of the already hypertrophied cervix, interfering with normal circulation and muscular contractility. Cervicitis, therefore, is not a surface infection, but involves the entire structure, including the glands and lymphatics. Eradication of the infected tissue, together with its contained glands, is essential not only as a therapeutic measure, but also to preclude the possibility of subsequent development of cervical carcinoma.

The symptoms of endocervicitis are many and vary in the order of importance and frequency. They are: leukorrhea, backache (particularly sacral and low lumbar), pain in the lower abdomen, menorrhagia, metrorrhagia, dyspareunia, dysmenorrhea, dysuria and sterility.

In acute cervicitis, there is a thick purulent or muco-purulent discharge. The region about the external os is acutely inflamed, red and swollen. On bimanual examination, there is extreme tenderness in both the parametrium and uterosacral areas. The patient may or may not have increased temperature. This condition is most commonly seen in acute infections due to the gonococcus, or acute infections following infected abortions. Treatment consists of bed rest and chemotherapy until the acute infection has subsided. Douches may or may not be given, but with douching there is some danger of washing bacteria up further into the cervical canal and into the uterus. Acute cervicitis, under proper therapy, may be completely eradicated and there will be no residual

* Read before the 94th Annual Session of the Maine Medical Association, Poland Spring, Maine, June, 1948.

infection with its resulting vaginal discharge. In the neglected case, or the ones that do not respond to therapy, chronic endocervicitis results, with destruction of tissue, erosions, and Nabothian cyst formations as previously described. Because infection in chronic endocervicitis is confined not to the surface but extends to the deeper layers as well, it is obvious that treatment by means of douches and topical applications to the cervix can be of no avail. The use of douches and medicated tampons for the treatment of chronic endocervicitis is only palliative, and does not cure the disease. The cure of endocervicitis can only be obtained by the destruction of the deep seated infection. This can be accomplished by means of coagulation or cauterization of the cervix. In those cases showing extensive deep infection, conization or amputation of the cervix may be indicated. In older individuals, with deep seated infection and other associated pelvic pathology, complete hysterectomy, with the removal of the cervix, should be considered.

Where erosions are not too extensive and the cervix not greatly hypertrophied, simple linear cauterization of the cervix by means of a nasal-tip electrode should suffice. This is a simple office procedure, usually producing a few menstrual-like cramps. Usually about three linear applications of the hot nasal-tip electrode to the anterior and posterior erosions, going down about $\frac{1}{8}$ of an inch, will cure the mildest endocervicitis. It is necessary that the electrode go up into the cervix for a distance of about $\frac{1}{2}$ inch in order to destroy infected glands higher up in the endocervix. After cauterization, the patient has more or less increase in the amount of vaginal discharge. Sloughing off of the resulting scab occurs in about a week, and the patient may notice a small amount of vaginal bleeding. The cauterization is usually healed in about four weeks, and by that time the infected erosion should be replaced by normal epithelium. If such has not occurred, then a recauterization of the cervix, or a more radical removal of the endocervix (which usually requires anesthesia and hospitalization) is indicated. After healing, the patient should be observed once a month for at least six months, during which time the endocervix should be dilated to be sure that no stricture formation exists, and, if such does, these strictures may be dilated so that cervical stenosis does not result.

Trauma from childbirth or instrumentation does not in itself result in endocervicitis. Invasion of one or more pathogenic organisms is essential. It is for this reason that the postpartum patient should be examined six weeks after delivery, when lacerations and erosions may be treated before infection of such open wounds can take place. The treatment of erosions and lacerations in the postpartum patient is successfully accomplished by simple cauterization, by means of the nasal-tip electrode or by coagulation

with a ball type electrode, using any one of the many electro-surgical units now available. The linear application of the cautery to these fresh granulations will result in prompt healing. Postpartum cases that have been cauterized should be followed until the cervix is entirely healed, because it is quite possible that the entire amount of granulating tissue has not been burned out and a further cauterization may become necessary. Here again, the healing process is the same as that which has been described before.

Cervical polyps may arise from any part of the endocervix, and may vary greatly in size. Frequently they bleed to the slightest trauma. Rarely are they malignant. The base of the polyp may be clamped with a hemostat and the polyp removed by twisting its pedicle until the polyp falls off. The base of a removed polyp should always be cauterized to prevent recurrence and bleeding. The polyp should be immediately placed in formalin solution and sent to the laboratory for examination. Patients who have shown cervical polyps in the past should be encouraged to return for a check-up examination at least every six months because of the possibility of further polyps forming.

Leukoplakia of the cervix is not infrequently seen. It is characterized by whitish or silver-gray patches situated around the external os. These patches cannot be rubbed off by an applicator. The disease should be considered premalignant. The lesions should not be cauterized but should be excised, with a wide area of normal tissue included.

Ulcerations due to tuberculosis and syphilis are occasionally seen, and should be borne in mind. Diagnosis can be made by dark-field examination of the exudate from these ulcers, biopsy, and serological examinations.

The cervix is not only the most common site of infection in the female, but it is also the most common site of fatal cancer. In no other organ does preventive medicine have more to offer than in the cervix. No longer should we pride ourselves in detecting cancer of the cervix when it is in the Group I to IV stage. We should, on the contrary, condemn our profession for allowing the disease to progress this far. By means of the Papanicolaou Smear and biopsy, cancer of the cervix should be detected in its in situ or early microscopic stage, when it is curable by complete hysterectomy. If we could educate the laity to submit to a physical examination every year and educate our profession to do a conscientious examination and Papanicolaou Smears on all patients, cancer of the cervix should rarely be found in our vital statistics as a primary cause of death.

Cancers in growing shed their surface cells. These cells can be recovered in the vagina and detected when the vaginal discharge is smeared on a slide,

stained, and examined by a competent cytologist. This is the basis of the Papanicolaou Smear. That cancer of the cervix in its early microscopic stage can be detected by this technique can be readily proved by the presentation of results obtained in my own private practice. During the past seven months, all patients over 35 years of age, and some younger if the cervix was suspicious, have had a Papanicolaou Smear taken. The following charts will show the results of this examination.

Number of patients smeared	274
Number of positive smears	7
Number of positive cases confirmed	6
Incidence of cancer of cervix	2.2%
False positive	1

FIGURE I

It seems incredible that 2.2% of an unselected group of female patients, mostly over the age of 35, should have proven cancer of the cervix. Yet, we know through the figures of our vital statistics that more women die of cancer of the cervix than of any other organ. I know of no other test except the biopsy that can detect cancer in its early pre-invasive stage. Pre-invasive cancer, or cancer in situ, is one that can be discerned only by microscopic examination. It is one where the change is only in the surface epithelial cells and where the basement membrane has not been broken through. In this stage, and in no other, can cancer of the cervix be cured by complete hysterectomy, and where the surgeon may, if the patient is young, feel safe in not removing the ovaries. The biopsy has its limitations because a cancer so minute as cancer in situ is, can easily be missed. The Papanicolaou Smear is a highly sensitive screening agent. It lacks the accuracy of a "lucky" biopsy; but it does point the way, and warns us of the presence of trouble. What other diagnostic aid that may be so easily and inexpensively applied do we have that may give us more information? We take thousands of bloods to detect syphilis, which is not as great a killer as cancer of the cervix, and yet we find fewer positives than we do with the Papanicolaou Smear. It is not too optimistic to believe that in the future all women will have this test applied at yearly intervals, and that cancer of the cervix, instead of being the greatest tumor-killer of women, will be the least.

In my group of patients there was one false positive report, that is, the smear was reported positive, but cancer of the pelvic organs could not be found after hysterectomy. This occurred in a patient who had severe post-menopausal bleeding and the indications for hysterectomy were: post-menopausal bleeding and fibroid tumor of the uterus. False positive reports with this test, as in any other test, do

occur. With this knowledge, we should not jump to the conclusion that cancer is present, but should confirm this positive finding by repeating the test, taking biopsies of the cervix, and thoroughly curetting the uterus. Even a thorough D and C with multiple biopsies of the cervix may not reveal the presence of microscopic cancer. It is only by the removal of the uterus and serial having sections made of the cervix that this elusive microscopic cancer can be found. In deciding whether or not the uterus should be sacrificed when examination of cervical biopsies and endometrium have been reported negative, one must consider the patient as a whole. If she is young, certainly we do not want to hysterectomize unless we are absolutely certain that cancer exists, and therefore repeated vaginal smears should be taken. Three successively positive vaginal smears, taken at monthly intervals, and examined by a competent cytologist, even in presence of negative biopsies, I feel is a just indication for hysterectomy. A positive Papanicolaou report does not call for emergency procedures, because it has been shown that years may elapse before the in situ cancer may be clinically demonstrable. This is why we should expect 100% cures by treating patients with cancer at this stage.

	Age	Menorrhagia	Metrorrhagia	Discharge	Para	In Situ	Group	Biopsy
MM	46	+	0	+	3		I	+
CO	61	0	+	+	3		II	+
LS	41	+	+	0	0	+		0
HC	45	0	0	0	1	+		0
AD	44	0	+	0	5	+		+
NO	41	0	0	+	2	+		0

* Equals Positive.

FIGURE II

Figure II is a break-down of the six verified positive reports. All but one patient was in her fourth decade. The first two patients were clinically easily diagnosed because they were in the Group I and Group II stage of the disease, where adequate therapy by radiation should offer the first patient a 75% survival rate and the second patient a 40% survival rate for five years. The next four patients were all cancer in situ cases, and should show 100% survival. They all had complete hysterectomies. In two cases, one ovary was allowed to remain. In one patient, 27 serial sections were cut from the cervix before the cancer was found. In one patient, meno-metrorrhagia of 15 years duration was the chief complaint, and hysterectomy was recommended because of the bleeding, plus a fibroid tumor of the uterus. Pathological examination showed cancer of the cervix in

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REHABILITATION OF THE CIVILIAN AMPUTEE

By THOMAS A. MARTIN, M. D., Portland, Maine

War with its mutilating injuries has always made mandatory an increased interest in amputation which often results in notable advances in surgical technique and improvement in prosthetic appliances. Figures for the Second World War released as of July 1, 1945, reveal that over 15,000 amputation cases have been treated in the various amputation centers established by the Army and Navy of the United States and no doubt there will be many more before the toll of the war is ended. However, the problems of amputation are not limited to time of war and the military services. The number of amputations performed each year among the civilian population of this country far exceeds amputations performed in the armed forces even in war time. The American Federation of the Physically Handicapped has estimated that there are approximately 75,000 new amputation cases in this country every year, and that of this number, 40,000 are major amputations requiring prostheses. The National Safety Council has reported that, prior to World War II, 32,500 amputations resulted annually from accident causes alone. From the above statistics, it is evident, that in this country, there are five times as many civilian amputations annually, as were performed in the combined armed forces of the United States, in the worst war in history.

As Sir Reginald Watson-Jones has aptly said: "Amputation is the beginning and not the end of treatment." Too often, as I have observed it, the surgeon feels that his responsibility has ended with the healing of the wound. On the contrary the least and easiest part of the problem has been solved; unfortunately the most difficult and important features lie ahead. The amputation of a limb is nearly always accompanied by considerable emotional shock which far exceeds the physical. This is particularly true in individuals previously healthy and active in whom amputation has been necessary to save life from an unexpectedly severe trauma or fulminating infection. The more emotional and unstable the patient, the more profound the shock is apt to be. Whereas in cases of chronic disease or deformity, the amputee has a longer period of time in which to adjust himself, and the acute mental shock is minimal or absent. Despite the most optimistic mental attitude, every major amputation adds another physically handicapped person to society. Every physically handicapped patient must of necessity become an economic liability, both to his family and to his community. This is especially true in upper extremity amputation.

In any amputee, the question arises as to when

and where does rehabilitation begin? My answer to this is, when the patient enters the hospital. In operations of election, this can be done better, than in the hurried, emergency life-saving procedure. A frank honest explanation of the operation to the patient, together with the advantages and disadvantages, is of utmost importance. Being human, we all fear the unknown, and if the prospective amputee is made to realize what his limitations are to be, the easier it will be to rehabilitate him. Obviously in a double thigh amputation, there must follow considerable impairment and limitation of activities. Therefore, the surgeon in such a case must explain this to the patient, not to discourage him, but only to protect him from eventual disappointment, should he expect too much. A carefully planned and executed operation, followed by skillful nursing care, gentle handling and dressing of the stump, adequate sedation for relief of pain, plus pleasant, cheerful surroundings during convalescence, are tremendously important in overcoming the patient's depression, and in preventing the development of local functional disturbances, which contribute to psychic projection to the cerebral centers, and the promotion or exaggeration of phantom pain.

While convalescing, the patient is allowed out of bed at the earliest, possible moment, with daily increase of his activities. Occupation and physiotherapy should be instituted early, and an appraisal of the patient's capacities should be made by observations, interviews and aptitude tests. The amputee must be encouraged to do things for himself, in an attempt to develop self-reliance which he will so badly need in the future. Encouragement, understanding, thoughtful consideration and guidance are fundamental. *Pity* plays no part in the program as this is deeply resented by any handicapped person.

According to Dr. Henry H. Kessler of the U. S. Navy there are four major objectives in the rehabilitation of the amputee, the foundation of which will be laid in the hospital. "They are: 1) social living (the routine pursuits of life), 2) the ability to take care of himself (personal hygiene), 3) the problem of transportation, 4) the problem of employment with all its ramifications." The first step in the program is physical restoration. This is accomplished by the prothesis. In the lower extremity, this serves two functions. It conceals the defect and replaces the lost function. In the upper extremity, these two functions are less adequately served, as the prothesis does not conceal as well, and the function of the hand cannot be duplicated—only imitated. Con-

sequently upper extremity amputation present a more serious problem to all concerned in the program. This becomes increasingly true in the upper arm or above the elbow amputation. In this type training is more difficult and the amputee's patience is sorely tried. It is obvious that regardless of the extremity which may have been lost, the prosthesis is valueless unless the patient is trained to use it. Unless this has been accomplished, it is foolish to attempt vocational guidance or training. The greater the degree of functional restoration and self-reliance the amputee attains, the greater the possibilities for social, vocational, and economic success.

In military service, amputees are trained in special centers, established for that purpose and staffed with highly-trained, specialized personnel; in addition these centers are equipped with the most up-to-date equipment that money can buy. Contrast this specialized equipment and personnel, with the facilities of the average hospital in our own State; naturally, we must of necessity fall short of approximating any such facilities. As I have frequently remarked to my friends, if I had to lose an extremity, I would prefer that it would happen in the armed forces; for then I would have an opportunity of being adequately rehabilitated. Granted that none of us have available the vast resources that Uncle Sam has provided for Service connected amputees (and Lord knows they have earned it) there are still many ways in which we, as surgeons, can render real service to the rehabilitation of our civilian amputees. As stated above, the first step in the program begins with the operation. In emergency or potentially infected cases, war surgery has taught us that guillotine amputation plus post-operative traction, give the best results in all such cases. With elective, clean cases, carefully planned flaps, proper soft tissue to bone ratio, well placed scars and a minimum of soft tissue and periosteum stripping, will reward the surgeon with a larger percentage of better functional and less painful stumps. In this age of aseptic surgery, antibiotics and skillful anaesthesia, it behooves us to take an extra half hour, if necessary, to make our technique as atraumatic as possible.

I believe that "phantom pain" develops in practically 100% of all cases of amputation. Atraumatic surgery, wise sedation, and gentle manipulation of the stump will do much to minimize these symptoms. As surgeons, we have all seen the wretched and miserable individuals, in whom the psychic projection of these symptoms to the cerebral centers, has made them either drug addicts or suicides. Once this has occurred, despite the surgeon, neuro-surgeon and psychiatrist, rehabilitation is usually impossible. This is a serious responsibility which the surgeon has to bear with his amputees. Even in the well-adjusted patient, there remains much to be done. After proper

healing of the stump has occurred, shrinkage of the soft-tissues in a satisfactory manner, is of paramount importance. This can be very well accomplished by skillfully bandaging the part with crepe or elastic bandages daily. This duty must *not* be delegated to a nurse, but should be performed either by the surgeon himself or a properly trained resident or intern. Also at this time proper stump hygiene should be taught, so that the patient may avoid troublesome and painful skin irritation and infection. At this stage of his convalescence, the amputee should be started on active exercises to regain his muscle tone and prevent joint contracture. Extremely important in this program, is the early provision of the amputee with his prosthesis. This not only helps him physically but also provides a tremendous boost to his morale. In the past, the patient was required to wait at least six months before he could obtain his prosthesis. This more or less arbitrary period of time was considered necessary for shrinking the stump. As we all know now, a period of six or eight weeks suffices, with proper management as outlined. In procuring the limb, there should be close coöperation between the surgeon and the limb-maker. As surgeons, we are not expected to know all the details of the manufacturing process, but we should have a general knowledge of the prosthesis, and be able to supervise the fitting of it. The all important factor is whether or not the apparatus fits, and not the kind of material from which it is made.

Having arrived at the point where our patient has obtained his prosthesis, the next step is obvious. He must be taught how to use it, and not discharged a few days after receiving it. For the first few days, the amputee is only allowed to wear the limb so as to become accustomed to it or "get the feel of it" as it were. When he has become accustomed to it, then the instructions in its use should begin. One of the large insurance companies, in its Rehabilitation Center, has an amputee instruct its patients in the use of the prosthesis. This method has several advantages, because it provides a teacher who has learned from experience, and because of this obvious fact, the amputee is provided with a concrete example of what can be done. Psychologically, this is of inestimable value. Unfortunately, in Maine, there is no center available to which amputees may be referred. However, I believe that with enough interested people participating, facilities could be obtained for such a program in this State.

Vocational rehabilitation under the Federal Security Agency is now available to all physically handicapped persons, both men and women, in all of the forty-eight states; the District of Columbia, Hawaii and Puerto Rico, who are in need of such service and can profit by it. It is a coöperative Federal-State

Continued on page 245

CLINICO-PATHOLOGICAL EXERCISE

Case presented at Maine General Hospital, Portland, Maine

Edited by JOSEPH E. PORTER, M. D.

This is the case of a 38-year-old white obese, pregnant female, Gravida VI, who was due to deliver the day before her admission to this hospital. She had apparently been quite well and the course of her pregnancy perfectly normal until five days prior to her admission, when she stated that she developed the "grippe." She did not see a doctor at this time, and no further details were available. About twelve hours prior to admission she noted the onset of substernal pain which seemed to be aggravated by coughing. Four hours after the onset of this pain she was seen by her physician who prescribed a cough mixture. Subsequently, six hours prior to admission the patient went into active labor.

Past History: Unavailable.

Physical examination of the patient upon admission revealed her to be acutely ill. Her temperature was 98 degrees, pulse 96 per minute and weak; respirations dyspneic; not counted. Talking was very difficult but she did complain of substernal pain. The blood pressure was unobtainable. There was cyanosis of the lips and nailbeds. The skin was ashen gray. She was perspiring profusely. Extremities were cyanotic, cold, and clammy. There was minimum ankle edema. Lungs were filled with moist rales throughout. There were no areas of bronchial breathing or absent breath sounds. The heart sounds were distant and of poor quality. No rubs or murmurs were noted. The rhythm varied from regular to gallop. Abdomen was enlarged and consistent with a full-term pregnancy in active labor; labor pains were occurring every 6-8 minutes. The fetal heart was not heard at any time. Rectal examination revealed the cervix to be dilated to 5 fingerbreadths and to be one-half taken up. The presentation was vertex and engagement had occurred. There was a moderate amount of sero-sanguinous discharge from the vagina. The patient was placed in an Oxygen tent and given Demerol and Coramine; however, she went into coma and expired one hour after admission.

DISCUSSION

Dr. Robert Lorimer: Here is a 38-year-old woman at term who became the victim of some sort of catastrophe which terminated fatally in a very short space of time. We are given no details of her past history, and are informed only that this was her sixth pregnancy and that up to the time of her pres-

ent illness she had been feeling well. We note that five days prior to admission she developed the "grippe." Lacking any further details, I am unable to attach any significance to this. However, we note the onset of substernal pain 12 hours prior to admission apparently aggravated by coughing. Eight hours before admission she was apparently well except for this complaint. She was seen by a physician who found her up and about. Two hours after he visited her she went into active labor, six hours prior to admission.

Upon admission to the hospital she was apparently moribund. Prominent among the features noted on admission was the presence of severe shock with marked dyspnea, cyanosis, clammy extremities, and ashy grayness of the skin. The pulse was very weak although it was counted at 96 per minute. The blood pressure was unobtainable. We also note that in addition to the cyanosis there was pulmonary congestion, the lungs being filled with moist rales.

From the obstetrical standpoint the uterus was behaving properly. There are no hints in the record of a tetanically contracted uterus; it appeared to be relaxing well between pains. Two features, however, are worthy of note: fetal death had already occurred, and there was a watery bloody discharge in moderate amount from the vagina. We note also that this had taken place following the engagement of a normal vertex presentation.

Given the above information, what are the possible causes of such an obstetrical disaster in the terminal part of pregnancy? What event or series of events could result in fatal termination of a normal pregnancy in a few hours?

I believe it is indisputable that this patient was suffering from severe shock. That this shock was due to hemorrhage, however, I think is doubtful. I find it difficult to discount the evidences of pulmonary congestion, not generally associated with severe hemorrhage alone. The principle causes of intrapartum hemorrhage sufficient to induce shock from blood loss are placenta praevia, premature separation of the normally implanted placenta and rupture of the uterus. As to the placenta praevia, I believe that the presence of an engaged vertex and the absence of frank external bleeding should rule out this possibility.

Premature separation of the normally implanted placenta is more difficult to exclude in this case, espe-

cially that of the toxemic variety with partially concealed hemorrhage, but I believe that the shock is probably too severe to be commensurate with this condition. However, it should be noted that the absence of an obtainable blood pressure does not exclude it; a previous hypertension which could have terminated as congestive failure accounting for the pulmonary picture. The presence of a sero-sanguinous discharge is also entirely consistent with this. However, one would expect the uterus to be tetanically contracted and not relaxed between pains in this condition; and, moreover, severe abdominal pain is an almost constant feature of premature separation of placenta of this degree.

Rupture of the uterus can occur entirely apart from previous abdominal section in the prepartum or parturient patient. The picture is also one of severe shock in the majority of cases, but the presence of pulmonary signs, together with the absence of any abdominal pain or signs of hemorrhage in the peritoneal cavity and the continuance of apparently normal contractions would seem in my mind to militate against this possibility.

Bearing in mind the picture of cyanosis, pulmonary congestion, and shock presented by this patient, one might consider coronary occlusion. I can confess that I am unable to exclude this as a cause of the patient's death, but I think it is very unlikely in view of her age group. It is an extreme rare complication in the parturient.

I believe that there is another group of conditions more consistent with this picture. These include the various embolic phenomena—those due to vascular emboli, placental fragments, fat or air. I believe that fat emboli can be excluded, and air embolus is not found as far as I know except immediately postpartum. Pulmonary emboli from placental fragments have been reported, but are excessively rare. In 1941, Steiner and Lushbaugh¹ from Chicago, reported a group of eight cases, all terminating fatally during or immediately following labor, which were characterized by sudden, severe shock, chills, dyspnea, cyanosis, ashy gray perspiring skin, a weak, rapid pulse and a pulmonary edema. Since that time seven additional cases have been reported, all of which have terminated fatally. A recent case with recovery of the patient is on record, believed to be due to this syndrome, but with certain inconsistencies which still place it on the doubtful list. This entity although as yet not thoroughly clarified is protean in its occurrence and manifestation. It is that of pulmonary embolism by amniotic fluid. Predisposing factors in its causation are: advanced obstetrical age, an oversized infant, intrauterine death of the fetus, presence of meconium in the amniotic fluid, and uterine tetany or unusually vigorous uterine contractions. Of the group of 14 cases, there

was a total fetal salvage of only six cases and two of the original eight patients died undelivered; although meconium was found in a high percentage of cases in which this feature was recorded, there was one case in which considerable blood was mixed with amniotic fluid, and another in which bloody fluid alone was noted. Two cases of ruptured uterus were reported in this series.

The present case to my mind presents certain features similar to those of cases previously reported. There are certain inconsistencies notably the onset of substernal pain a considerable time before the patient came into the hospital. Only in one of the reported cases has chest pain been prominent. This was in a patient who had a ruptured uterus with severe shoulder pain, and this seems entirely consistent with diaphragmatic irritation from free blood in the peritoneal cavity. As a matter of fact the absence of chest pain has been a criterion in distinguishing amniotic fluid emboli from the vascular type. The lack of meconium in this case is somewhat disturbing, but one case is on record where bloody fluid was found. However, it seems to me that the phenomena listed in this report are consistent with those of this syndrome. She is a multipara of reasonably advanced obstetrical age, who enters the hospital intrapartum and at term, in severe shock associated with cyanosis and pulmonary edema, who carries a dead fetus, and who died undelivered one hour after admission. Therefore, my primary diagnosis is pulmonary embolism due to amniotic fluid. Other diagnoses which need to be considered are: pulmonary infarction, followed by vascular embolism and perhaps coronary occlusion.

Dr. Porter: I think Dr. Lorimer's diagnosis in this case should certainly excite some discussion and with which you might take issue. His diagnosis is amniotic fluid pulmonary embolism. He has also mentioned coronary occlusion, ruptured uterus, and pulmonary embolism.

Dr. Harold E. Everett: I would like to know what the abdomen felt like?

Dr. Porter: The record doesn't say anymore.

Dr. Charles Glassmire: Maybe I can say a word or two about this, as I believe I am the only one here who was present at the time. This woman came in fairly late at night, at which time she was cyanotic and pretty much in shock and died just about an hour later. Her abdomen was soft between pains. There were no signs that would be consistent with peritonitis. However, it was a very difficult thing to evaluate. The record says she was obese; that was certainly true. She must have had an abdominal wall about six inches thick. I don't imagine you could have heard the fetal heart sounds if there were any.

Dr. Everett: I was thinking that if she had pre-

mature separation of the placenta, she would have had a very tender abdomen.

Dr. Glassmire: Not tender between pains.

Dr. Everett: I would never think of an amniotic thing, because I have never run into it. I would either bet on coronary occlusion or ruptured uterus.

Dr. Porter: Which one would you say?

Dr. Everett: I would put coronary first.

Dr. Philip McCrum: I don't remember the diagnosis of this case, but I would figure that she probably died of a ruptured uterus. The only thing that I can't quite make agree with this diagnosis is the cyanosis. I would expect her to be more pallid rather than cyanotic. She might have had some heart failure along with it, which might account for her cyanosis. It is possible that she could have had a rupture in broad ligament early, and then later rupture into the peritoneal cavity. Regarding amniotic emboli, it doesn't say whether the membranes have been ruptured or not, and my understanding was that membranes had to be ruptured in order to get amniotic embolism.

Dr. Lorimer: That was confusing. I didn't know whether the membranes were intact. No mention actually by original authors about where or when the membranes were ruptured. I suppose that one must have ruptured membranes, but the presence of serosanguinous discharge was noted.

Dr. Porter: Dr. Drake, will you say a word or two inasmuch as coronary occlusion has been mentioned as a possibility and question of heart failure.

Dr. Drake: What was said about heart failure isn't very convincing. It might be due to congestive heart failure, might be due to something else. Minimal ankle edema in a woman at term wouldn't be unnatural. Certainly coronary occlusion is very uncommon in a woman at 38, commoner in men, might be considered more common in women who were extremely obese. I don't see how one can do anything but guess, but it seems more likely that the cyanosis and rales in the lungs were the result of grippe. It would also seem more likely that the whole picture was caused by pulmonary complication rather than cardiac on the law of averages.

Dr. Ralf Martin: I don't think I have anything to add to that.

Dr. Allan McLain: I would like to see Dr. Lorimer correct on it, because it is a new idea to me. I had no idea of amniotic emboli, but I feel from the history that I would go along with Dr. McCrum on ruptured uterus.

Dr. Lorimer: I didn't believe this really is the true diagnosis, but it actually is not so uncommon as people would be likely to believe. Statistically it is

the most frequent cause of fatal termination and cause of death in intrapartum cases. Since then there have been a few other cases.

Dr. Alexander Laughlin: Was this woman seen in clinic? What did the examination show at that time? I think it is very important to see what you found in the pelvic examination. What the blood pressure was, and the pelvic findings at that time. Did she have a lacerated cervix or any old cervicitis?

Dr. Martin: Because of the history of grippe five days before the substernal pain, I wonder whether she might have had a small pulmonary embolism five days previously and the symptoms which she considered as grippe at the time of her onset were due to that and then later a massive pulmonary embolism from the legs.

Dr. Porter: The cause of death was massive hemorrhage from a ruptured uterus. The rupture was on the right side as Dr. McCrum predicted and into the broad ligament and then ruptured out into the pelvic cavity. The fetus presented through it except for the head. Membranes were still intact at the time of autopsy. There was a large amount of blood in the abdomen; approximately 500 c.c. was fluid and a large amount of clotted blood. Numerous sections were taken through the site of the rupture and we were unable to demonstrate any disease. The muscle showed nothing unusual. There was bilateral mild bronchopneumonia.

Dr. Zolov: Was there any attempt made to save the baby.

Dr. Porter: This question was discussed at general staff meeting, and the county attorney felt a doctor was morally obligated to remove the baby in the hope that it was still alive. The right of the baby to live is not within the jurisdiction of the husband.

Dr. McCrum: Doctor Brown wrote to various people and I believe the consensus of opinion of the lawyers was that we not only had the right, but were almost obligated to do it in the chance of getting a live baby.

Dr. Lorimer: Even in the absence of any fetal heart?

Dr. McLain: What is the status of the husband? Is it not his property to do with as he sees fit? Isn't it entirely up to the husband whether that operation can be done or not?

Dr. Porter: I do not believe the husband has the right to decide the fate of the baby. Any more discussion?

Dr. McCrum: Can you give an opinion as to about when the rupture took place?

Dr. Porter: I believe that day.

Dr. Glassmire: I would like to know whether it is

Continued on page 240

THE PRESIDENT'S PAGE

From time to time some of our members express the idea that the affairs of the Association are in the hands of the "Old Guard" and are run as a closed corporation.

What are the facts?

Article VI of our present constitution says: "The Council shall be the Board of Trustees of this Association. It shall consist of the Councilors, the President, the President-Elect and Secretary-Treasurer of the Association."

Section 2, Chapter VI of the By-laws states: "Each Councilor shall be the organizer, peacemaker, and censor for his district. He shall visit each county in his district at least once a year — for inquiry into the condition of the profession, and to keep in touch with the activities of and to aid in the betterment of the component societies of his district."

The members of the Council are elected by the House of Delegates following the expressed wishes of the county members whom the delegates represent. Rotation is assured by fixed terms of office.

It has been suggested that each County Secretary notify the present Councilor in his district of the dates of all county meetings in order that the required visitation may be made during the year.

A study of the list of present officers and Council members should assure all that the affairs of our Association are in the official hands of properly elected representatives, in no sense an "Old Guard" and sincerely asking for helpful suggestions from our entire membership.

FORREST B. AMES, M. D.,
President, Maine Medical Association.

EDITORIALS

COUNCIL VOTES TO HOLD FALL CLINICAL SESSION IN PORTLAND

The Council of the Maine Medical Association in session August 1st, at Lucerne Inn, Lucerne-in-Maine, voted to accept the invitation of the Cumberland County Medical Society to hold its Fall Clinical Session in Portland — preferably early in November. The dates for this meeting and an outline of the program to be arranged by the Cumberland County Society will be published in the September issue of the JOURNAL. Keep this meeting in mind — it will be well worth your while.

At this same meeting it was voted to poll the members of the Association to determine what type of scientific program is most desired for the Ninety-fifth Annual Session, to be held at Poland Spring, June 19, 20 and 21, 1949. This action was taken at the request of Dr. Martyn A. Vickers, of Bangor, Chairman of the Scientific Committee. Consequently, a questionnaire was sent to each member of the Association on August 7th with returns to go to Dr. Vickers not later than August 21st. All returns received on or before that date will be studied by Dr. Vickers and members of his committee, who will then proceed with plans for the 1949 meeting in accordance with the wishes of the majority.

It was also voted that the President, Dr. Ames, appoint two members as Delegates to the annual

meeting of the National Physicians' Committee, in addition to Dr. Vickers, and Dr. Francis A. Winchenbach of Bath, who will attend as members of the Association's Committee to Coöperate with the National Physicians' Committee. The delegates to this meeting which will be held in Chicago, September 6 and 7, will, on their return, visit the county societies and acquaint the members with the policies of the N. P. C. You will then have first hand information relative to this organization which you have heard so much about, and which has the approval of the A. M. A., and of your own Association.

It was suggested that your President devote his President's Page, in this issue of the JOURNAL, to an explanation of the duties of the Councilors, inasmuch as some of the county societies do not seem to have a clear understanding of this subject. If you haven't already read this page, please do so and keep in mind the fact that each member of the Council stands ready at any time to fulfill these duties.

In closing, I would like to commend the Officers and Councilors for a 100% attendance at this first regular meeting for 1948-1949, and to the members of the Scientific Committee who were there to get plans underway for the 1949 annual session.

THE JOURNAL'S FIRST "HOSPITAL NUMBER"

This issue of the JOURNAL, known as the Maine General Hospital Number, is the first in a series of Hospital Numbers to be published under the jurisdiction of the Editorial Board, of which Eugene E. O'Donnell, M. D., of Portland, is Chairman. This Board, which was appointed by the Council in August, 1947, consists of one member from each Councilor District (whose names you will find on Page IV), plus an auxiliary committee consisting of one member from each County Society.

The second in this series of Hospital Numbers will be in October; the material to be submitted by the Central Maine General Hospital of Lewiston. The hospitals assuming these assignments will take

the responsibility for all the scientific material appearing in the assigned issue, and it is the intention of the Board to make this plan automatically repetitive year after year.

I want to congratulate Drs. Donald H. Daniels, Donald F. Marshall, and Howard R. Ives, who were in charge of arrangements for this issue; and the authors, for the excellence of the Scientific Material appearing in this first Hospital Number.

The "new look" which the JOURNAL has been wearing since May of this year was the first step suggested by the Editorial Board to be put into effect, and, if you have noticed, increases not only the length but the width of each column.

Common Diseases of the Cervix—Continued from page 232

situ. The cervix showed mild endocervicitis, and was nulliparous, a cervix that would not have been removed if we still persisted in doing supravaginal hysterectomies for fibroid tumors, and later would have developed cancer of the cervical stump.

The second patient complaining of metrorrhagia had had post-coital bleeding on two occasions. In spite of her having had 5 children, she had a well epithelialized cervix and a normal sized and feeling uterus, but a positive biopsy was obtained by curetting the endocervix. The other two patients consulted me for other than gynecological complaints. In each, in situ cancer was discovered with the aid of the Papanicolaou Smear. The finding of cancer of the cervix in these two patients illustrates the value of doing a complete physical examination on all patients regardless of their chief complaint and the routine taking of the Papanicolaou Smear.

The technique of taking the smear is simple. The patient is instructed to report for examination without having taken a douche. Before examining the patient or inserting a speculum, the contents of the posterior vagina are aspirated through a tube. These secretions are spread on a slide. Care should be taken that the smear is not made too thick, as this makes examination difficult. The slide is immediately fixed by inserting it in equal parts of 95% alcohol and ether. It is left in this solution for one-half hour. Then it may be removed, dried and placed in a suitable container to be sent to the laboratory for study. It is not necessary to place glycerin on the slide as many authors have recommended. In the laboratory, this slide is stained by a rather complicated method of staining, and it must be examined by a person familiar with vaginal cytology. If cancer of the cervix is present, characteristic tumor cells can be seen in the smear. When one receives a report from a pathologist that the Papanicolaou Smear is positive, then one should search diligently for the site of cancer. In order to make this search, a second smear should be taken, and biopsy of the cervix is

indicated if it has not already been done at the time the smear was taken. In taking a biopsy, one must consider that the most common site of fatal cancer of the cervix is at the external os, where several biopsies should be taken. However, one of the most easily overlooked sites is in the endocervix. Biopsy from the region of the external os or from an everted or eroded anterior or posterior lip of the cervix can easily be done by simply cutting away a piece of tissue by means of a scalpel, the use of the biopsy punch or the endotherm. Any one of these methods is satisfactory. Taking a biopsy is not painful. When tissue has been removed from the cervix, it is not uncommon for a small amount of bleeding to occur. This bleeding can be controlled by cauterizing the base of the denuded area by means of the actual cautery or by packing the cervix with a tampon. To biopsy the endocervix, considerable difficulty may be encountered if one does not have a satisfactory instrument. The endocervix is about 1 inch in length and does not admit an instrument of any great size. I have found the Duncan curette, which is a sharp narrow curette designed chiefly for the taking of endometrial biopsies, to be the most satisfactory method of scraping the endocervix. The endocervix should be thoroughly curetted by means of this curette and the tissue obtained, plus also tissues obtained from biopsy at the external os, should be immediately placed in formalin solution and sent to the laboratory for examination.

CONCLUSION

1. Endocervicitis is a preventable disease if adequate treatment of the acute infectious stage is given, and if all patients who have been delivered receive intelligent postpartum care.
2. The early diagnosis of pre-invasive cervical cancer can be accomplished by education of the laity to have a yearly physical examination, and the education of physicians to the importance of taking routine Papanicolaou Smears on all patients.

Clinico-Pathological Exercise—Continued from page 237

characteristic of ruptures to act like labor? Apparently this woman had pains every 6-8 minutes.

Dr. Everett: Generally pain stops when the uterus ruptures, and the fundus generally contracts down much smaller than it was previously.

Dr. Isaac Webber: What is the treatment for a ruptured uterus?

Dr. Lorimer: Laparotomy-hysterectomy.

Dr. James Parker: Did anybody consider doing a peritoneal tap on her?

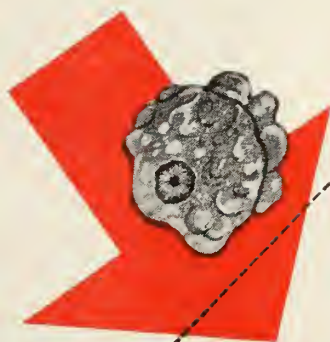
Dr. Glassmire: No, because we didn't consider anything was wrong in her abdomen.

Dr. Parker: If pelvic examination were done, would it have revealed the rupture.

Dr. Porter: I think one would have been able to see this hemorrhage by looking into the vagina.

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COUNTY SOCIETY NOTES

Lincoln-Sagadahoc

A meeting of the Lincoln-Sagadahoc Medical Society was held at the Boothbay Harbor Country Club on Tuesday, July 20, 1948. Eleven members were present.

Donald Anderson, M. D., of Lewiston, gave an interesting talk on Pediatric Urology, and showed films on some of the cases presented. A discussion was then held, followed by remarks from Drs. Philip Sylvester and George Dash, both retired Pediatricians.

Neil Parsons, M. D., of Damariscotta, was elected Secretary-Treasurer for the balance of the year.

NEIL PARSONS, M. D.,
Secretary.

Washington

A meeting of the Washington County Medical Society was held July 8, 1948, at the St. Croix Country Club, Calais, Maine, with sixteen members and two guests present.

Oscar F. Larson, M. D., of Machias, presided in the absence of the President.

Raymond V. N. Bliss, M. D., of Blue Hill, spoke commemorating the 50th Anniversary of W. H. Miner, M. D., and W. J. Gilbert, M. D., both of Calais. He contrasted the practice of medicine fifty years ago with that of today and emphasized the effect that Socialized Medicine and Prepaid Medical Care would have on our present system of practice. This was followed by a period of discussion on Prepaid Medical Care.

The following officers were elected for 1948:

President: Willard H. Bunker, M. D., Calais.

Vice President: Hazen C. Mitchell, M. D., Calais.

Secretary-Treasurer: Karl V. Larson, M. D., East Machias.

Censors: Richard E. Buker, M. D., Eastport (one year); James W. Crane, M. D., Woodland (two years); and Samuel R. Webber, M. D., Calais (three years).

Delegate to the Maine Medical Association: James C. Bates, M. D., Eastport. Alternates: Oscar F. Larson, M. D. (1st), and John T. Metcalf, M. D., Calais (2nd).

Dr. Bates was appointed Chairman of a Committee to investigate fee schedules.

E. O. Thomas, M. D., of St. Stephen, N. B., invited members of the Washington County Medical Society to attend the annual meeting of the New Brunswick Medical Association on September 7 and 8 at Bathurst, N. B.

It was voted to hold the next meeting on September 9th at the Johnson House, Dennysville, with W. Mayo Payson, Executive Secretary of the Maine Medical Association, as speaker.

KARL V. LARSON, M. D.,
Secretary.

New Members

Penobscot

Ward A. Albrow, M. D., 175 Webster Avenue, Bangor.

Washington

Wesley F. Bosworth, M. D., Calais.

NEWS AND NOTES

State of Maine

Board of Registration of Medicine

Adam P. Leighton, M. D., 192 State Street, Portland, Secretary.
List of physicians licensed in the State of Maine July 7, 1948.

Through Examination

- Dr. Edward G. Asherman, Brooklyn, N. Y.
- Dr. Giulio John Barbero, Philadelphia, Pa.
- Dr. Werner Oskar Lippmann, Bangor, Maine.
- Dr. Walter K. Long, Boston, Mass.
- Dr. Frank W. Pisciotta, Highland Park, N. J.
- Dr. Robert B. Robertson, Boston, Mass.
- Dr. Richard Shuman, Philadelphia, Pa.
- Dr. Samuel L. Wagner, Bangor, Maine.

Through Reciprocity

- Dr. Louis Bachrach, Brunswick, Maine.
- Dr. Herbert M. Baganz, Jr., New Harbor, Maine.
- Dr. Samuel Dessoff, Washington, D. C.
- Dr. Herbert R. Edwards, Jackson Heights, N. Y.
- Dr. Gustaf Walter Erickson, Jr., Lewiston, Maine.
- Dr. Edmund Noyes Ervin, Waterville, Maine.
- Dr. Russell Perry Hager, Providence, R. I.
- Dr. Walter Henry Harper, Portland, Maine.
- Dr. Lee Harrington, Jr., Wilmington, Delaware.
- Dr. Austin J. Horan, Philadelphia, Pa.
- Dr. Henry A. Hudson, Marblehead, Mass.
- Dr. Peter Felix Lansing, Peak's Island, Maine.
- Dr. Orrin Levin, Boston, Mass.
- Dr. Hugh J. Mathews, Jr., Gardiner, Maine.
- Dr. Dudley Merrill, Tenants Harbor, Maine.
- Dr. Clark F. Miller, Boston, Mass.
- Dr. Lloyd Emery Morris, Jr., Bangor, Maine.
- Dr. Henry Karl Puharich, Camden, Maine.
- Dr. Marian L. Sprague Strickland, Canaan, Maine.
- Dr. Joseph Sataloff, Philadelphia, Pa.
- Dr. W. J. White, Jamaica Plain, Mass.
- Dr. George W. Wood, III, Bangor, Maine.

Department of Health and Welfare Services for Crippled Children Clinic Schedule — 1948

ORTHOPEDIC CLINICS

Portland — Maine General Hospital, 11.00 a. m.: July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.
Lewiston — Cenaral Maine General Hospital, 9.00-11.00 a. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.
Rumford — Community Hospital, 1.30-3.00 p. m.: Aug. 18, Oct. 20, Dec. 15.
Waterville — Thayer Hospital, 1.30-3.00 p. m.: Aug. 26, Oct. 28, Dec. 23.

Rockland — Knox County Hospital, 1.30-3.00 p. m.: Aug. 19, Nov. 10 (Wednesday).

Machias — Normal School, 1.30-3.00 p. m.: Aug. 11, Oct. 13, Dec. 8.

Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.00-3.00 p. m.: July 7, Sept. 14, Nov. 3.

Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: July 6, Nov. 2.

Fort Kent — Normal School, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Sept. 15.

Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.

Bangor — Eastern Maine General Hospital, 10.00 a. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m. Oct. 27.
By appointment only.

PEDIATRIC CLINICS

Bangor — Eastern Maine General Hospital, 1.30 p. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

Waterville — Thayer Hospital, 1.30 p. m.: July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.

Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: July 21, Sept. 22, Nov. 17.

By appointment only.

MENTAL HEALTH CLINICS

The Division of Mental Health conducts monthly clinics for children and adults in the following cities:

Portland — Health and Welfare Office, 178 Middle Street, 1st and 4th Mondays.

Lewiston — Out-Patient — Central Maine General Hospital, 3rd Thursday.

Waterville — Out-Patient — Thayer Memorial Hospital, 3rd Friday.

Bangor — Out-Patient — Eastern Maine General Hospital, 1st Wednesday afternoon. Valentine School, Union Street, 1st Thursday.

Function — Consultation, diagnosis and adjustment of habit, behavior, personality and emotional disorders and school problems in children through the age of 17.

Adults — problems in general adjustment and personality.
Types of Difficulties to be Referred:

- Habit disorders — Feeding problems, lack of bowel control, bed wetting, thumb sucking and nail biting.
- Conduct disorders — Aggressive behavior, temper tantrums, anger, destructiveness, lying, stealing, truancy, masturbation and sexual perversions.
- Emotional disorders — Stuttering, tics, fears and anxieties, night terrors, compulsive behavior, hysteria.
- Psychosomatic disorders — Psychoneuroses (based on physical inferiorities), allergic and gastric disturbances, obesity.

e. School problems — Lack of adjustment to school, placement in grade, failure in one subject only, physical handicaps, day dreaming, inattention, Retardation.

Referral blanks should be sent to the Director, Division of Mental Health, Department of Health and Welfare, Augusta. Patients will be seen by appointment only.

Referrals may be made by any of the Divisions of the Department of Health and Welfare, Department of Education, private social agencies, school superintendents, private physicians and parents.

The Division maintains a traveling clinic which visits the following places at sometime during the year: Caribou and Presque Isle, Houlton, Lincoln, Machias, Old Town, Rockland, Rumford and South Paris.

Tumor Clinics

- Bangor:** *Eastern Maine General Hospital*
Thursday, 11.00 A. M.-12.00 M.
Director, *Magnus F. Ridlon, M. D.*
- Lewiston:** *Central Maine General Hospital*
Tuesday, 10.00 A. M.-12.00 M.
Director, *E. C. Higgins, M. D.*
- St. Mory's General Hospital*
Wednesday, 4.00 P. M.
Director, *R. A. Beliveau, M. D.*

Portland:

Maine General Hospital

Thursday, 11.00 A. M.-12.00 M.

Director, *Joseph E. Porter, M. D.*

Waterville:

Sisters Hospital

1st and 3rd Thursdays, 10.00 A. M.

Director, *R. L. Chasse, M. D.*

Thayer Hospital

2nd and 4th Thursdays, 10.00 A. M.

Director, *A. H. McQuillan, M. D.*

Venereal Disease Clinics

The Department of Health and Welfare, Bureau of Health, maintains facilities for the diagnosis and treatment of venereal diseases in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford,
Lewiston, Portland, Rockland, Rumford,
Sanford, Waterville, Wilton and Winthrop.

Any physician wishing to refer an indigent person for diagnosis or treatment may obtain the name of the nearest clinic physician by contacting the Department of Health and Welfare, Bureau of Health, State House, Augusta, Maine. If no clinic facilities are available, physicians will be authorized to treat indigent patients in their offices. Authorization should be requested before treatment is started.

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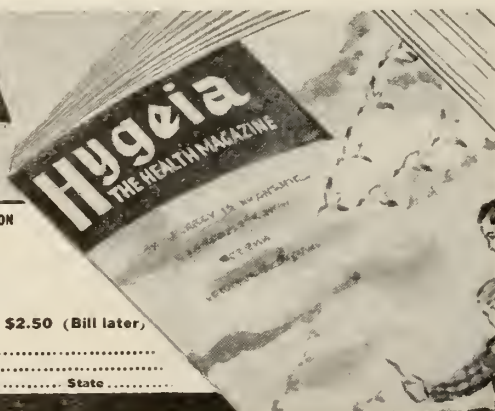
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Rehabilitation of the Civilian Amputee—Continued from page 234

plan, with the Federal Government matching state funds allocated on a 50-50 basis. As applied directly to the rehabilitation of the amputee, this service furnishes adequate prosthetic appliances to bring the amputee up to his maximum capability of employment, or further surgical care for revision or reamputation in unsatisfactory stumps. This treatment is followed by vocational training, and selective employment placement. I have had numerous contacts with the Maine Vocational Rehabilitation Agency, and hold their work in the highest esteem. Only conditions which are remediable may be treated, and the hospitalization is limited to ninety days for any one disability. Therefore, when anyone of us, has an amputee who will need rehabilitation, the Vocational Rehabilitation Department should be notified early while the patient is in the hospital. I have been told by Mr. Mitchell of the Vocational Rehabilitation Service, that when notified early, his department frequently can do much more for the patient, than a year or two later. About eight months ago, I at-

tended a round-table discussion as a guest of the Maine Vocational Rehabilitation Department, which I found very instructive. I learned that they depend very much and are guided in large part by the physician's recommendations. Since their funds which are allocated annually are limited, they must be expended wisely, and here the surgeon plays an important part. For instance, with an old and debilitated patient, a prosthesis becomes of doubtful value, as most of them are never used, and eventually end up on a closet shelf. If we all evaluate our amputees more carefully, and work together as a team, the surgeon, the physiotherapist, the occupational therapist, the prothesis-maker and the Vocational Rehabilitation Department, we will have made a long step towards the conservation of the greatest of all assets — the working usefulness of human beings.

BIBLIOGRAPHY

Kessler, Henry H.: U. S. Navy Medical Bulletin, 44:1196, 1945.

HOSPITAL STAFF MEETINGS
Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

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Volume Thirty-nine

Portland, Maine, September, 1948

No. 9

THE FIELD OF ALLERGY

ETHAN ALLAN BROWN,* M. R. C. S., London. L. R. C. P., England

The general practitioner whose formal schooling ended before Allergy became a specialty in its own right or who had had some lectures on the subject, with no recent postgraduate work, seems to feel that few of his patients have allergic complaints, while he hears of many cases for whom dramatic "cures" were effected by some strange medical super-detective work. In his own experience, however, some of his chronically ill patients have given much of their time and money to "allergy studies" and afterwards have shown little or no improvement possibly, as he often suspects, because they were not initially "allergic." Excepting for hay fever he never feels quite certain as to what conditions are or are not due to allergy.

In recent years, the subject has become well demarcated and the syndromes associated with sensitivity are not difficult to define.

In the broad sense of the word, it has been said that all medicine is only a small part of Allergy. In a limited sense, it seems that some Allergy pervades almost every department of internal medicine. If we limit ourselves, however, to the important conditions, we may say that there are at least seven distinct groups of allergic phenomena. Many classifications of these have been published and the best known is probably that of Sulzberger.³ None of the classifications are, however, completely satisfactory since a

condition may, on one occasion, be listed according to its morphological characteristics, and on another by its etiology, and again by the organ involved. Nevertheless a clear picture of the types of Allergy can be drawn so that each may easily be recognized.

There is at present no completely satisfying definition of Allergy. If immunological terms are used, they are too abstract for everyday purposes. A common-sense definition will necessarily omit references to complex (and often hypothetical) immunological processes. What is understood, however, by almost all definitions is, that a patient who is allergic responds abnormally to substances which cause no response or rather, no harmful reaction in normal individuals. The typical reaction is smooth muscle spasm or mucous membrane edema.

If we limit the types of reactions that we choose to term allergic as those seen associated with the conditions to be enumerated below, our definition will satisfy all but the most exacting critic. Such reactions (as in anaphylactoid shock) may seem to affect the patient as a whole or may be limited to one or more tissues or shock organs as the skin, the upper respiratory tract, or the blood.

The first and basic form of Allergy is, probably, Anaphylaxis. It was once thought that Anaphylaxis and Allergy described differing conditions, the first seen in animals and the second, in man. If the word Allergy is used as an all-inclusive and general term, Anaphylaxis can be accepted as a form of Allergy.

* Physician-in-Chief, Allergy Department, The Boston Dispensary, Boston, Mass.

This is especially true since Allergy (as pollen sensitivity) has been seen in animals and secondly, since anaphylactic shock in humans resembles, and in many ways is probably identical with, Anaphylaxis in animals.

It should be recalled, however, briefly, that in Anaphylaxis the sensitivity is artificially induced by the injection of a "foreign protein." After the incubation period, a second injection of the same material causes anaphylactic shock. If the animal is not killed by the second injection it is, for a variable period of time, refractory to further shock. If small injections of the same material are given during the incubation period, the onset of sensitivity may be delayed or else, the animal may not become sensitized and is difficult, if not impossible, to shock. In summary: an animal may be sensitized and left alone (remaining sensitive); it may be sensitized and shocked so that it may live and for some time be refractory to further shock; it may be killed by the anaphylactic reaction or it may be desensitized. The only reason for listing these facts is that it is not generally realized that the procedures necessary for sensitizing, desensitizing, shocking to kill and shocking to make refractory differ only in the amounts used and the time interval between exposures. This is one of the fundamental facts which enables us to treat human beings by injection therapy.

The second group of allergic conditions is termed "Atopic." This class includes the clinically allergic patient who suffers from hay fever. A good number of the cases of bronchial asthma are due to atopy. Patients with atopic eczema belong in this group, as do occasional cases of urticaria and migraine. In the early stages of some of the conditions listed the patient's lesions are reversible. When in time they have become irreversible the discovery of the original allergens helps us little in their present treatment. In other cases, a nonallergic component may easily completely overshadow any allergy which may be present. These are the patients who must be selected with care if they are to have allergy studies. Unless they are carefully selected according to some common-sense criteria, the diagnostic procedures may well be a waste of time and energy.

The typical patient of the atopic group usually has a strong family history of similar types of atopy and consistently presents more than one allergic manifestation. Whatever the shock organ, the symptoms are usually explicable as being due to increased capillary permeability, occasionally associated with smooth muscle spasm. Locally, the affected tissues and secretions, or, generally the blood, present an eosinophilia. The blood also contains what is termed "passive transfer antibodies," their presence being responsible for the positive scratch or intradermal tests.

Negative skin tests, may be due, among other

things, to the fact that the sensitivity is mild or the testing solution weak, or else that the sensitivity is of a type which does not give positive skin tests especially if the patient's skin is in a refractory condition. It should be stressed and remembered that there is no better or more satisfactory test than that available to every practitioner at all times, the exacerbation upon exposure to the causative allergen and the remission following its elimination.

The sensitive substances are too numerous to be listed but, in any case, include any water-soluble protein derived from ingested foods and any inhalant originating from animal, plant, insect, mould, bacterial or chemical sources.

The third group of allergic conditions can be placed in the category termed the "contact allergy." The lesions affect the skin and manifest themselves as an "epidermal spongiosis," in its most typical form, poison ivy dermatitis. There is a history of exposure. The patch test of the oil-soluble substances must be positive in a dilution which causes no reaction upon a normal skin. There are no antibodies and no precipitins and here again, relief follows elimination as exacerbation follows exposure. Weber¹ has at various times listed the known external causes of dermatitis alphabetically by substances and by occupation. This list has been extended by Schwartz,² the number including plants, totalling more than 1500 known contact irritants.

The fourth group of patients are those sensitive to drugs. The reaction is never that caused by an overdose of the drug, nor is it an exaggerated pharmacological response. It differs from the poisonous manifestations of the drug and is usually produced by doses far below the poisonous or pharmacological limits. The drug may cause its effects by inhalation, injection, absorption through the skin or by contact.

A clinical picture of the typical allergic drug exanthem is only occasionally characteristic as when seen in the response to bromides or to phenolphthalein. The same drug as, a sulphonamide, may elicit a different type of skin manifestation in two patients taking it at the same time and may itself bring on various manifestations in the same patient. A drug sensitivity may prove its presence by wheezing, nausea, colonic spasm, and diarrhea, with bleeding from the uro-genital tract, lymphadenopathy, joint swelling, fever, or as the typical nitritoid crisis seen in treatment with arsenicals. When the skin is affected, the reaction may mimic the morbilliform or scarlatiniform rashes, or may resemble pityriasis or the erysipeloid exanthemata. It may occasionally be bullous or show itself as an erythema exudativum multiforme, erythema nodosum, a lichen ruber, an exfoliative dermatosis, a purpura, or any type of nodular, ulcerous or pemphigoid eruption. The rash may be localized or disseminated.

It is not necessary for the patient to have a definite history of drug ingestion as such, since he may have taken it unwittingly. There are many catalogues of the preparations containing individual drugs, the majority of which, at one time, carried no label indicating the presence of the offending substance. Brown¹ has listed the ingredients of the proprietary drugs used for the treatment of allergic conditions. The patient sensitive to arsenic may ingest a sufficient amount to cause a rash from unwashed fresh fruits or vegetables and also from tobacco. In some regions drinking water is decontaminated with aluminum sulphate containing arsenic. A number of foods as shell fish, milk and eggs may contain a drug when it may be a part of the original source of the substance of the animal from which the food product was derived.

Those drugs which cause urticarial reactions may, although extremely rarely, give skin tests of the atopic type as exemplified by wheals with pseudopodia. The drugs which cause the acneform type of eruption may, also rarely, give positive patch tests causing a skin condition similar to the original eruption. Patch tests may also produce an eczematous type of reaction in those cases in which there is an eczema; although almost every drug available commercially has, at sometime or other, been described as causing untoward reactions.

Those most commonly reactive are: acetanilid, acetophenetidin, acetylsalicylic acid, antipyrine, arsenic, the barbiturates, belladonna, bismuth, the bromides, chloral hydrate, cinchophen, codeine, dinitrophenol, ephedrine, emetine, the iodides, ipecac, phenobarbital, mercury, morphine, penicillin, phenolphthalein, procaine, quinine and the sulphonamides and streptomycin.

Since it is known by clinical experience that the rash following a single ingestion of a drug may remain with a patient for many weeks, although there has been one single exposure, dramatic relief should not always be expected to follow immediately upon elimination of any suspected drug.

The fifth group of patients are those sensitive to infection, usually to bacteria but occasionally to endotoxins, exotoxins or to bacterial metabolic products. The patient sensitive to fungi and to viruses also belongs in this group which is extremely complex, in its variety. It includes the allergic reactions of exanthemata, the virus diseases of smallpox and lymphogranuloma inguinale as well as those of tuberculosis, and syphilis, and the parasitic infestations. Skin tests, when done, are of the diagnostic type resembling a tuberculin reaction and are usually read in forty-eight hours.

Such skin tests may be present in the following conditions: Actinomycosis, Aspergillosis, Blastomycosis, Cestode infestations, Chancroid, Coccidioid

Granuloma, Diphtheria, Bacillary Dysentery, Filariasis, Glanders, Gonococcal infection, Leishmaniasis, Meningococcal Meningitis, Pneumonia, Schistosomiasis, Haemolytic streptococcal infections, Trichinosis, Tularema, Typhus fever and Undulant fever. In these patients, the allergy as such is a minor part of the problem. The patients are rarely treated for their allergy but rather for the original conditions, which, of course, are not typically allergic diseases. It is well to remember, however, that a part of the clinical picture is the obvious result of an underlying mechanism, allergic in nature.

The occasional patient who responds with bronchial asthma to an infected upper respiratory tract may or may not be allergic to bacteria but his wheezing is usually not due to a bacterial sensitivity. He may be classified as having asthmatic bronchitis or his super-imposed infection may be acting secondarily to make him more susceptible to an extrinsic allergen.

The sixth group of patients are those who present a sensitivity to "foreign protein." The word foreign is to be taken as meaning foreign to the blood stream since the substances, often heterologous, may be biological materials of a homologous species, among others, the proteins of the brain, testicle, kidney, pancreas, or pituitary. Patients sensitive to insect bites also belong with this group.

Serum sensitivity is an excellent example of an heterologous serum causing "foreign protein" allergy. The reaction may be immediate, as urticaria, or delayed, as in serum sickness, and may be local, general or systemic in type. The reactions may be associated with fever, urticaria, joint pains, lymphadenopathy, leukopenia and various types of eruptions. Since there is an invariable history of the injections of a foreign protein, the diagnosis is not usually difficult. The patient with a suspected serum sensitivity should, however, be tested if only to corroborate the diagnosis should the question of future injections arise, in which case it will be known that the sensitivity to serum of equine origin is perhaps not accompanied by a sensitivity to bovine or other sera which in that case may be used instead.

The last patients are those usually termed sufferers from "physical" allergy. The abnormal response to physical agents such as heat, cold, light, mechanical irritation or mild trauma, may be an urticaria. The patients are allergic only in the broadest sense of the word, and their symptoms can usually be reproduced by experimental exposure to the physical agent responsible for their condition. The reaction may be local, as in an urticaria of the hands, or reflex and general, affecting the entire body. It may affect a specific system as perhaps the skin or the genitourinary tract as in paroxysmal haemoglobinuria. Relief on avoidance of the irritating factor is usually complete and tolerance can often be acquired if ex-

posure is carefully graduated. It must not be forgotten that physical factors may cause exacerbations of the other forms of allergy, in which case they act as secondary agents and in the absence of allergy, of themselves, cause no difficulty.

Granted that the patient belongs to one of these seven groups, he may, relatively often, in the presence of any of the agents which cause his difficulty, not respond. With a subliminal exposure, his symptoms may be sub-clinical, that is, the patient may not be conscious that he is wheezing although examination of the chest proves the presence of sibilant and sonorous rales varying in pitch and intensity. In some patients, in the presence of true sensitivity, a secondary condition may be necessary and among such synergistic or predisposing factors may be barometric changes, physical agents, trauma, fatigue, emotional exhaustion, acute or chronic infection, focal sepsis, constipation, menstruation, over-exertion, the puberty or menopausal syndromes, and a number of other vague conditions difficult to prove as is mild hypovitaminosis, calcium deficiency, blood electrolytic disturbance, and temporary dysfunction of the gastro-intestinal tract or the ductless glands.

Given a sufficient exposure and those secondary exacerbating factors, the patient's response may be acute and reversible so that he is completely well between attacks or may be chronic and lead to permanent non-reversible changes after which time the removal of the allergenic agent does not bring on a remission.

If the reaction is general in type, the patient has what is termed a "constitutional reaction" or allergic shock. In this condition, when mild, there may be itching of the skin and an urticarial eruption. When severe, the patient may have dyspnea and wheezing, incontinence, the symptoms extending in degree to loss of consciousness. The concomitant signs may be a subnormal temperature, slowing of the pulse rate, lowering of the blood pressure, the blood showing a leukopenia and the blood chemistry a prolonged coagulation time and increased non-protein nitrogen content, with a decrease in the blood chlorides, blood calcium and phosphorus. The patient may also manifest a decrease in sugar tolerance.

When the condition is localized, it may affect almost any part of the body. In the nose and sinuses, the patient may present an acute or chronic coryza of the allergic, infectious, or vasomotor type with an acute or chronic sinusitis and polypi. The throat may be the seat of allergic tracheitis as manifested by a chronic cough. The lungs may respond with asthma. The mucous membrane punished by the allergens loses its normal immunological response and is more susceptible to infection.

The eyes may respond with pruritus and epiphora, as seen in Hay Fever. Severe cases may progress to

conjunctivitis or episcleritis. Any portion of the eye may be affected and there is a possibility, in some cases, of iritis or uveitis. Cataracts have been reported as having been due to sensitivity.

The organs of ear have been described as a seat of allergic complaints in patients who present a picture of Meniere's syndrome or a vertigo due to food sensitivity.

The skin, when it is the allergic shock organ, may present an urticaria or an angioneurotic edema, an atopic eczema or any one of a number of miscellaneous dermatological conditions such as localized or generalized erythemata or exfoliative dermatosis. Drug sensitivities may show themselves as purpurae, or as eruptions of the typical acneform type of skin reaction, seen in sensitivities of the bromide or iodide type.

It will be recalled (but listed only for the purposes of classification) that in the exanthemata of children, and the infectious dermatoses, the allergic manifestations are not usually given emphasis. These secondary allergic reactions of the skin are, on the other hand, often missed in the fungous infections. Here, a knowledge of the behavior of the secondary (allergic) epidemophytids is important since treatment directed toward them and not to the primary focus is worse than useless since it has no effect upon the patient's original condition and frequently gives him a secondary contact dermatitis.

In the patients in whom the shock organ is the gastro-intestinal tract, and who frequently give no skin tests although sensitivity to foods may be present, there are a number of possible manifestations of the acute or chronic type which may be predominantly vascular, spastic and occasionally inflammatory. The liver may act as a shock organ in arsenic sensitivity and in acute yellow atrophy.

Using "allergy" in its broadest sense, the genito-urinary tract may be the seat of a paroxysmal hemoglobinuria, (? physical allergy), cystitis, a nephritis (? bacterial allergy), and the infectious conditions: a chancre, chancroid and lymphogranuloma inguinale.

The cardio-vascular system may respond to Allergy with a periarteritis nodosa or with a thrombo-angitis obliterans with allergic causes acting concomitantly. In addition, allergic patients may occasionally present hypertension, hypotension, precordial pain and cardiac irregularity as bradycardia, tachycardia and extra systoles.

When the blood is affected, as in drug sensitivities, the most striking symptom may be agranulocytopenia or an aplastic anemia. Some patients with food sensitivities present a thrombocytopenic purpura. Others, free of symptoms in the hemotological system, nevertheless bear witness to their allergy with an eosinophilia.

Continued on page 254

THE ANOXIC ELECTROCARDIOGRAM AS A TEST FOR EARLY CORONARY SCLEROSIS

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Many workers have sought a test to demonstrate early coronary sclerosis before electrocardiographic changes occur. Many have been attracted by the obvious effect of anoxia on the electrocardiogram to use this as the basis of a clinical test. They encountered many difficulties but the development of the oximeter¹ has revived interest in the possibility. The oximeter is an instrument for readily and continuously determining the arterial oxygen saturation.

EFFECTS OF ANOXIA ON THE EKG

In Health

Experimental anoxia may be produced by several methods; by rebreathing air from which carbon dioxide has been absorbed, by lowering the oxygen content of inspired air, or by using the low pressure chamber. The last method is not feasible for clinical purposes.

Green and Gilbert² using the rebreathing method observed the responses of the circulatory system in twenty-one persons. They found: (a) A decreased P-R interval and R-T time, (b) a markedly decreased amplitude of the T wave with occasional inversion, (c) a tachycardia with continuing anoxia, and (d) eventual crisis manifested as syncope or circulatory collapse. Post-crisis changes were a progressive descent of the pacemaker toward the auriculo-ventricular node and abnormal conduction leading to auriculo-ventricular dissociation and bradycardia. The anoxia was not measured.

Katz, Hamburger, and Schutz³ used a similar rebreathing technique to study the effect of anoxia on the conventional lead electrocardiogram. They found T wave diminution with occasional inversion and S-T segment depression. Similar results were obtained by Dietrich and Schweigk⁴; Rothschild and Kissin⁵; Graybiel, et al.⁶; Levy et al.⁷ and by Riseman et al.⁸ using either the rebreathing technique or a technique in which the subject breathed air of lowered oxygen content. The changes in T waves and S-T segment were the most frequent and prominent; other changes were not always observed. The changes produced by anoxia were almost completely reversed when the subjects breathed pure oxygen for one minute.

The effect of anoxia at high altitudes and at ground level using the rebreathing technique on the electrocardiogram was studied quantitatively by

White.⁹ He showed early and progressive T wave depression in all leads with increasing anoxia. He noted early and consistent tachycardia. Other electrocardiographic changes were obtained only occasionally.

In Coronary Sclerosis

All investigations in individuals with coronary sclerosis under anoxic stress have showed changes that differed only quantitatively from those observed in normal individuals.

Katz, Hamburger, and Schutz³ subjected healthy individuals and patients with coronary sclerosis to reduced oxygen tension and found a tendency toward greater diminution in T wave in the latter group. However, the separation of the two groups using only the electrocardiographic response was not possible. Also, Levy et al.⁷ while attempting to devise arbitrary electrocardiographic criteria characteristic of anoxia found that the variability between individuals was too great to make the separation of the two groups cleancut.

The average degree of anoxemia produced by breathing 10% oxygen for 20 minutes was the same in a group of patients with coronary disease as in a group of normal controls in Barach and Steiner's experiments¹⁰. Hence, the explanation for the difference between the two groups probably lies in the response of the myocardium or coronary circulation to anoxia.

In Animals

Evidence from animal experiments supports the main conclusions of experiments performed on humans. Harris and Randall¹¹ studied records from electrocardiograph leads placed directly on the exposed ventricles of anesthetized dogs and found that the reduction in height of the R wave was proportional to the increased girth of the chest with respiratory motion. These changes persisted in the absence of anoxia. The anoxic change in the T wave could not be produced by inflation of the chest and appeared to be of cardiac origin. This suggests that a shift in the position of the heart in relation to the chest accounts for the R wave changes reported by some workers.

With progression of anoxia beyond the point of safety in dogs, Kountz and Gruber¹⁴ demonstrated that the T wave became upright after the initial in-

version, and it then increased in height and duration at the expense of the S-T interval. Eventually T fused with QRS. Similar changes were demonstrated by King and Hensen¹⁵ in dogs subjected to fulminating anoxia due to inhalation of pure nitrogen.

THE ANOXIA TEST FOR CORONARY INSUFFICIENCY

Katz, Hamburger, and Schutz³ using the rebreathing technique were the first to subject the heart to anoxemic stress to test for coronary insufficiency. They concluded that the test was of questionable value because of variability in the endpoint of production of pain and because of hazard to the patient. They did not measure the degree of arterial oxygen saturation induced.

Levy, Bruenn, and Russell⁷ modified the technique to use a mixture containing 10% oxygen for 20 minutes. They studied the effect on the electrocardiogram without reference to the production of anginal pain, except to terminate the procedure when pain developed.

Four electrocardiographic changes not produced in healthy individuals were found in many, but not all, of the patients with coronary sclerosis. These criteria were:

- (1) Arithmetic sum of RS-T deviation in four leads totalling 3 mm. or more.
- (2) Partial or complete reversal of the direction of T in Lead I accompanied by an RS-T deviation of 1 mm. or more in this lead.
- (3) Complete reversal of the direction of T in Lead IVF, regardless of RS-T deviation.
- (4) Partial reversal of direction of T in Lead IVF, accompanied by RS-T deviation of 1 mm. or more in this lead.

A positive test was regarded as a sign of coronary insufficiency; a negative test did not exclude it.

These workers noted that in the test the oxygen saturation of the blood varied from patient to patient. They claimed there was no direct relation between the degree of anoxemia and the magnitude of changes seen in the electrocardiogram. They observed unpleasant reactions without serious effects 46 times in 36 patients out of 1024 tests on 442 persons.

The test as devised by Levy did not attain general acceptance. Riseman, Waller, and Brown⁸ stated that the test was least likely to be reliable where reliability was most needed, in cases in which errors of diagnosis would have the most serious consequences. They pointed out the danger of inducing anoxemia in coronary or cerebral sclerosis. They cited the experiences of Schneider and Truesdale and of Greene and Gilbert who produced convulsions with 12% oxygen, and of Levy, Barach and Bruenn themselves

who produced pulmonary edema and transitory mental confusion. Though these untoward effects were infrequent with the precautions outlined by Levy, some occurred without any warning.

Other workers reached similar conclusions. Burnett, Nims and Josephson¹⁶ held that a test which showed an abnormal response in 19.2% of clinically normal persons in their hands could only becloud a difficult diagnostic picture further, especially since the test failed often because of lack of coöperation of the subject. Pruitt, Burchell and Barnes¹⁷ felt that the added risk as well as the added expenditure of time, effort and materials were justified in cases in which serious disagreement regarding the diagnosis existed or in cases in which a definite diagnosis was important.

DISCUSSION

The Millikan¹ oximeter provides a convenient instrument for the continuous, direct estimation of the arterial oxygen saturation. This should be a useful instrument for those interested in the anoxic electrocardiogram. The response of cardiac patients and healthy subjects can be studied under measured degrees of anoxia, a condition not possible in the previously cited work.

The T wave changes with anoxia are the most constant and provide a criterion for study. Their exact variation with changes in arterial oxygen saturation within the safe range has been described by White as has been mentioned above.

Before these data may be used as norms for a test for coronary insufficiency, several factors that may influence the anoxic electrocardiogram still remain to be evaluated. This must be done to differentiate sharply between changes due to anoxia and changes which may be due to other causes. The problems which must be considered are (1) age, (2) acid-base balance, (3) possible existence of non-reactors, (4) other conditions which lower the T wave, and (5) the possibility that other variables may correlate more closely with anoxia.

1. Age

May¹⁸ studied the electrocardiographic changes in oxygen deficiency in normal subjects of various age groups and found the most marked changes in young athletes and the least marked in the aged. Burnett, Nims, and Josephson¹⁶ failed to confirm these results. They suggested that May's observations may have been due to insufficient procedural standardization. They found no variation with age. This factor merits further investigation.

2. Acid-base Balance

Barker, Shrader, and Ronzoni¹⁹ reported that alkalosis produced by hyperventilation or by ingestion of

sodium bicarbonate reduced the amplitude of the T wave, and that acidosis increased it. Barach and Steiner¹⁰ confirmed these results. From the work of the latter it appears that the decrease of blood carbon dioxide and increase of pH is a factor producing the same changes in the electrocardiogram caused by anoxemia. To what degree this effect is mediated through changes in coronary flow or through changes in dissociation of oxy-hemoglobin is not known and would make interesting investigation. A satisfactory test for coronary insufficiency using the anoxic electrocardiogram must take these factors into account. If this is not done, the same electrocardiographic effect could be produced at several different levels of anoxia depending on the degree of hypocapnia induced during the test.

3. Possible Non-reactors

In 3 patients of a group of 20 and 2 normals of a group of 6, Barach and Steiner⁹ reported no significant lowering or inversion of the T wave or depression of the S-T segment with anoxemia. Further investigation of this will be necessary to exclude the possibility that certain members of the population do not respond in the usual manner to anoxemia.

4. Conditions Simulating the Effects of Anoxia on the EKG

Exercise, digestion, nicotine, and other agents flatten the T wave as does anoxia. Unless these factors are controlled, a test may give spurious results.

T wave depression results from many conditions other than anoxia. Exercise^{20, 21} causes changes similar to those of anoxia. This effect on the electrocardiogram has been adapted as a test of coronary insufficiency.²² Ingestion of food^{23, 24} or of ice-water,²⁵ smoking or administration of nicotine^{26, 27} cause depression of the T wave.

Alkalosis causes a reduced T wave,^{19, 28, 10} while acidosis causes an increased T wave. Flattening of the T wave with change of position or with maximum expiration has been reported^{29, 30} presumably due to rotation of the heart.

A provocative piece of work by Ashman, Ferguson, Gremillion and Byer³¹ shows that the lowering of the T wave in the isolated mammalian heart can be correlated with an increase in the pulse rate per se.

5. Other Variables

Although the T wave amplitude is most obviously correlated with arterial oxygen saturation, it is possible that T wave area may prove to be more meaningful. This bears investigation.

Freedberg, McManus, and Altschule³² have reported a marked shift in the ventricular gradient in a patient undergoing typhoid vaccine fever therapy when pure oxygen was administered. According to Wilson, MacLeod, Barker, and Johnston³³ the gradi-

ent is an expression of local differences in repolarization of the myocardial elements. It would be interesting to determine the effect of anoxia on the ventricular gradient.

SUMMARY AND CONCLUSIONS

Anoxemia tests devised heretofore have not achieved wide acceptance. Their usefulness has been limited and many workers have questioned their safety.

The human electrocardiogram shows progressive diminution in height of the T wave, depression of the S-T segment and tachycardia in response to mild and moderate anoxemia. With severe anoxemia these changes are reversed. The anoxic electrocardiogram of young adults is related to the arterial oxygen saturation.

This relation cannot serve as a norm for an anoxemia test for coronary insufficiency until the factors of age and blood pH are controlled or until their effects are better known. A test would not be reliable unless performed under carefully standardized conditions.

ACKNOWLEDGMENT

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The Field of Allergy—Continued from page 250

The central nervous system may show evidence to allergic reaction in epileptiform seizures as due to food sensitivity, and in headaches of the migraine type due to the same cause. In younger people, there are often psychic disturbances and it has been stated with good authority that in some of the patients with multiple sclerosis and with transient paralyses, sensitivity may play a role.

The bones and joints do not escape; and there are many authenticated cases of food sensitivity causing intermittent hydroarthrosis. Bacterial toxins from septic foci may cause joint reactions in the absence of joint infection.

It must be stressed that the conditions listed immediately above are, in the majority of cases, non-allergically caused. In any atypical case, in a patient who has a strong personal family history of Allergy, an allergic cause should be suspected.

It is understood that the list is incomplete and the

classification by no means perfect. Granted that there are many lacunae in our present knowledge, it is nevertheless possible to list those conditions which are most often allergic, those which are rarely allergic, and those which are rarely, if ever, allergic in origin. With this in mind, the treatment of any patient for whose condition an allergic cause is suspected becomes much more simple, and occasionally, dramatically successful.

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A SURVEY OF THE STILLBIRTHS AND NEONATAL DEATHS AT THE MAINE GENERAL HOSPITAL 1947-1948

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The purpose of this discussion is to review the stillbirths and neonatal deaths (during the first 24 hours) which occurred in this hospital during the year 1947-1948 and to discuss any practical methods which may improve our results in this field.

We shall consider a premature infant to be any infant born alive who weighs 2500 gms. (5 lbs.-8 ozs.) or less, whose heart beats, or who moves. This definition is that which is accepted by the American Academy of Pediatrics and must be rigidly adhered to by all institutions and agencies for reports and tabulations if experiences are to be comparable.

Premature birth takes a higher toll of infant life than any other pediatric condition and is one of the few leading causes of death among the general population. It is startling to note that more than one-half of the deaths from prematurity occur during the first 24 hours, as pointed out by Koch and his associates in Brooklyn. That period is the one in which the hazards of prematurity are directly reflective of prenatal and natal occurrences and are greatly influenced by the efforts of the obstetrician.

Mortality from premature births can be reduced in two ways: either by an actual overall reduction in the incidence of premature birth or by improvements in the handling of the premature infant during the process of labor and after birth. The obstetrician therefore, not only is entirely responsible for the reduction of the incidence of premature birth, but is also greatly concerned with the results of the pediatric efforts.

As Beck pointed out, the obstetrician must look on the birth of these smaller premature infants as *an obstetric failure*, a responsibility comparable to having a stillbirth. Accordingly, Beck recommended the following measures to help the obstetrician in reducing his incidence of premature births and in assuring a more viable infant:

1. Adequate supervision of the hygiene of pregnancy.
2. Proper advice concerning diet, coitus, rest, etc.
3. Immediate notification of obstetrician whenever any untoward symptoms appear.
4. Early discovery and presence of syphilis and vigorous treatment for it through pregnancy.
5. Prevention of congestive failure in cardiac disease through joint supervision by cardiologist and obstetrician.

6. Determination of size of child by means of X-ray.

7. Elimination of morphine, scopolamine, barbiturates, and general anesthesia in all labors in which prematurity is involved.

8. Administration of Vitamin K to the mother before pregnancy is interrupted and to all premature infants immediately after birth.

9. Preservation of the membranes as long as possible and episiotomy to protect the premature infant from the pressure and effects of labor.

10. Spontaneous delivery of the second twin if possible and avoidance of version and extraction whenever possible.

11. Postponement of the tying of the cord until it stops pulsating in order that the child may receive as much blood from the placenta as possible.

12. Reception of the newly born premature infant in a tub of warm water to prevent chilling while waiting for the cord to stop pulsating.

During the past year 1947-1948, at the Maine General Hospital there were 1341 deliveries; of these 395 were service patients and 946 were private patients. Let us first consider the number of stillbirths in this group of deliveries, the diagnosis, and compare our results with previous years, and with the results of other hospitals. In this series of 1341 deliveries, there were 20 stillbirths; 12 of these were private cases, and 8 were on service. The diagnosis of said stillbirths was as follows:

- Subarachnoid hemorrhage, atelectasis—1.
- Intrauterine asphyxia—5.
- Intrauterine asphyxia with placental infarct—2.
- Premature separation, delivery from below—3.
- Premature separation, Caesarian—1.
- Polyhydramnios, 8½ mos.—1.
- Prematurity—1.
- Undetermined weight 4 lbs.—1.
- Intrauterine asphyxia with congenital narrowing of laryngeal aperture—1.
- Multiple placental infarcts—1.
- Diabetic mother difficult extraction of shoulder 35 min. after head—1.
- Rh—7 mos.—1.
- Chronic nephritis—prematurity—1.

Now considering these 20 stillbirths in a series of 1341 deliveries this gives us a ratio of 14.1 per thousand. However, in the aforementioned group of still-

births, there were the following 5 cases which obviously had no chance of viability:

1. Caesarian section 6 mos.—nephritis—toxemia.
2. Spontaneous delivery 4½-5 mos.
3. Spontaneous delivery 5 mos.
4. Spontaneous delivery 6 mos. plus cord about neck.
5. Spontaneous delivery 6½ mos. premature separation.

This leaves a *corrected figure* of 15 stillbirths, or a ratio of 11.1 per thousand. It is interesting to note

that of the 20 stillbirths, 8 were on our service, and 12 were private patients, thereby showing a much higher incidence among the clinical group. Our overall corrected stillbirth ratio of 11.1 per thousand is an improvement over statistics in this hospital during the past 6 years (see chart # 1). It is also of note that even our uncorrected stillbirth ratio of 14.1 per thousand compares favorably with the figures recently reported from New York Marine Hospital, 14.4 per thousand and from the Philadelphia group, 13.6.

CHART #1

Year	1941	1942	1943	1944	1945	1947
Births	906	794	1195	1250	1171	1341
Deaths	39	53	73	57	83	
Stillborn	22	16	25	24	22	20
Live Births	884	778	1170	1226	1149	
Deaths in first day	17	17	25	18	49	23
Rate, first day	19.2	21.9	21.4	14.7	42.9	

Moreover, of this group of 20 stillbirths at our hospital during the year 1947-1948, none of the mothers received morphine sulfate during their labor at any time, a marked improvement in policy over that reported by Dr. Stetson in his review 1941-1945. However, two cases received over 10 grs. barbiturate and one case in addition, received 700 mgs. Demerol previous to delivery. Moreover, one other case could obviously have been salvaged if a staffman had been present, inasmuch as the resident encountered difficulty in delivering the shoulders, and a period of 35 min. elapsed before this was accomplished.

In reviewing our neonatal deaths (first 24 hours), we note there were 23 in a series of 1341 deliveries, or an uncorrected ratio of 16.1 per thousand. Of these, 15 occurred among private deliveries and 8 among our service patients; once again showing the greater incidence of neonatal death in the service group, as compared to the ones delivered as private cases. The diagnosis in this group of 23 neonatal deaths is as follows:

1. Prematurity—12.
2. Intrauterine malformation—1.
3. Interruption of pregnancy for heart disease with severe albuminuria—1.
4. Subcapsular hemorrhages of the liver—hemor-

rhages of brain and lung—lived 20 min.—not difficult delivery—Rh not known—1.

5. Placenta previa delivered from below 5½ mos.—1.

6. Asphyxia of newborn—no autopsy—1.

7. Atolectasis due to mechanical compression of herniated viscera through diaphragmatic hernia—1.

8. Intracranial hemorrhage (low forceps) blood examination negative, m. m. O. K.—mother Rx for Loues three years ago—1.

9. Spina Bifida and meningocele—1.

10. Cerebral hemorrhage — spontaneous delivery —1.

11. Rh-, atolectasis—no erythroblastosis—1.

12. Congenital heart disease (patent ductus and foramen ovale)—1.

Of this group of 23 neonatal deaths, I have discarded the following 9 cases as being non-viable, because their weight was less than 1500 gms. (3 lbs. 5 ozs.), and this is in accordance with the policy outlined by other groups in compiling statistics:

4 cases—5½ mos. premature.

1 case—5½ mos. premature—Caesarian—hypertension, albuminuria.

2 cases—5 mos. premature.

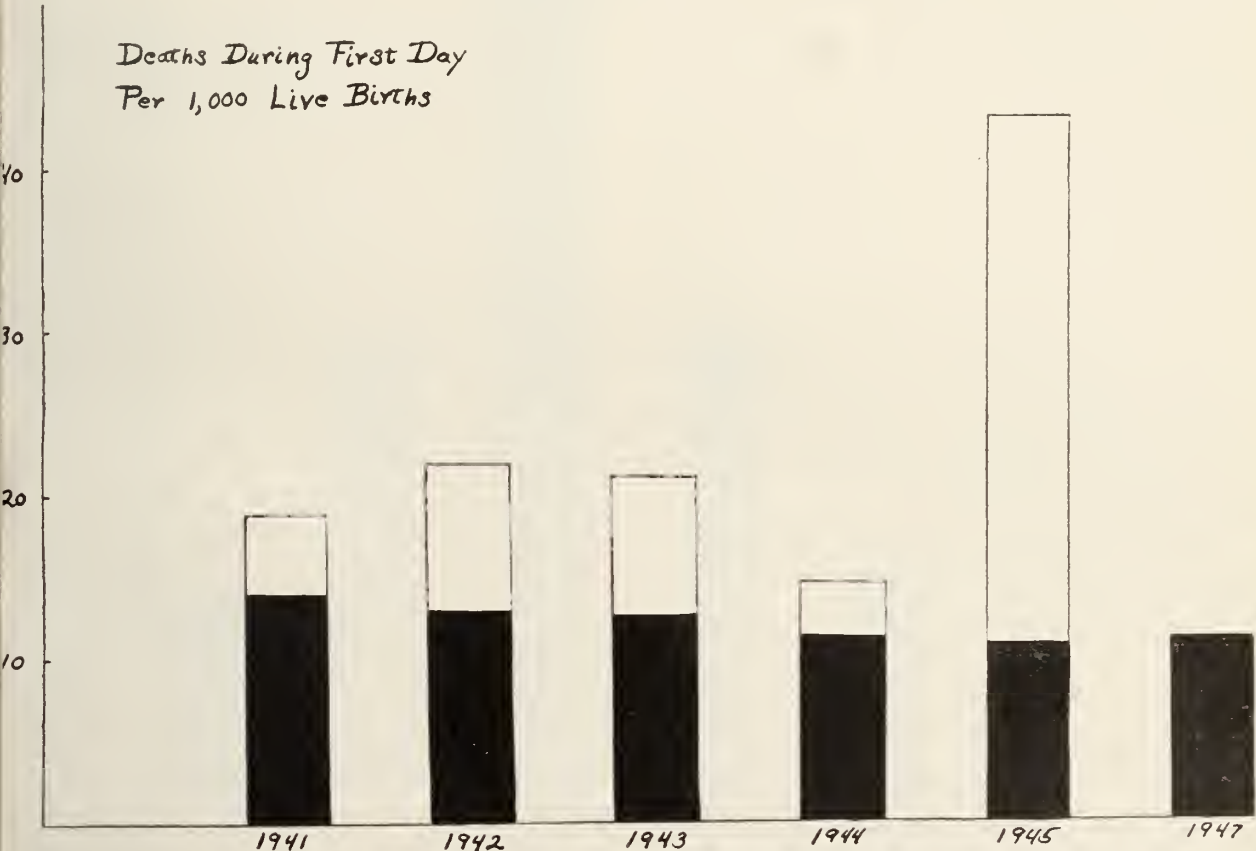
1 case—6 mos. premature.

1 case—4½ mos. premature.

Thus leaving 14 neonatal deaths, or a corrected mortality ratio of 10.4 per thousand. This corrected mortality of 10.4 per thousand compares favorably with the national United States figure of 11.4 per thousand in 1944, and is an improvement over the recent figures released from surveys in New York

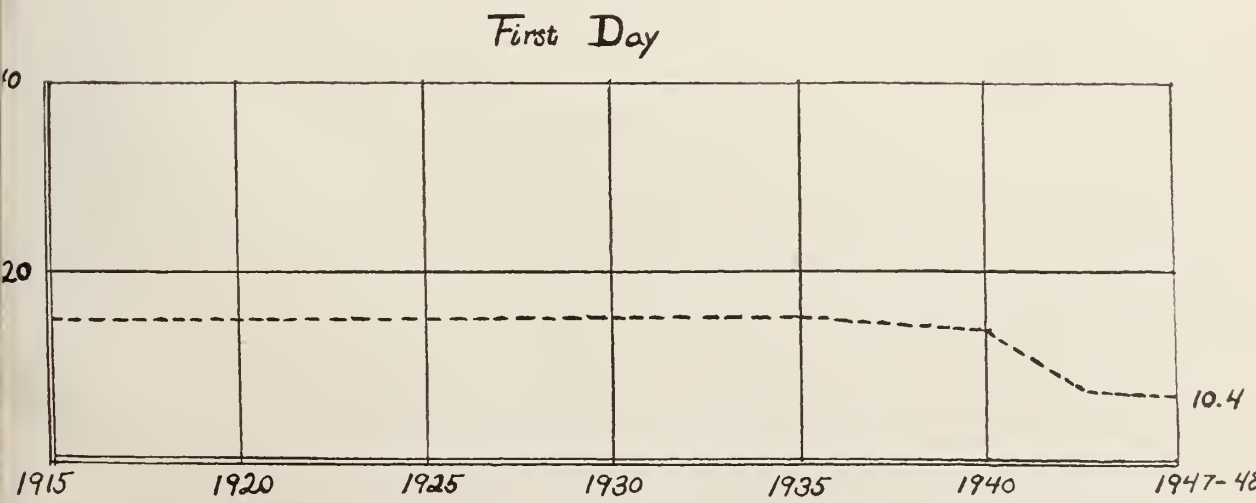
Marine Hospital, 13.8 per thousand, and in Philadelphia, 14.2 per thousand.
Also, our corrected ratio of 10.4 per thousand is an improvement over statistics compiled in this hospital 1941-1945 (see charts # 2, 3, and 4).

CHART #2



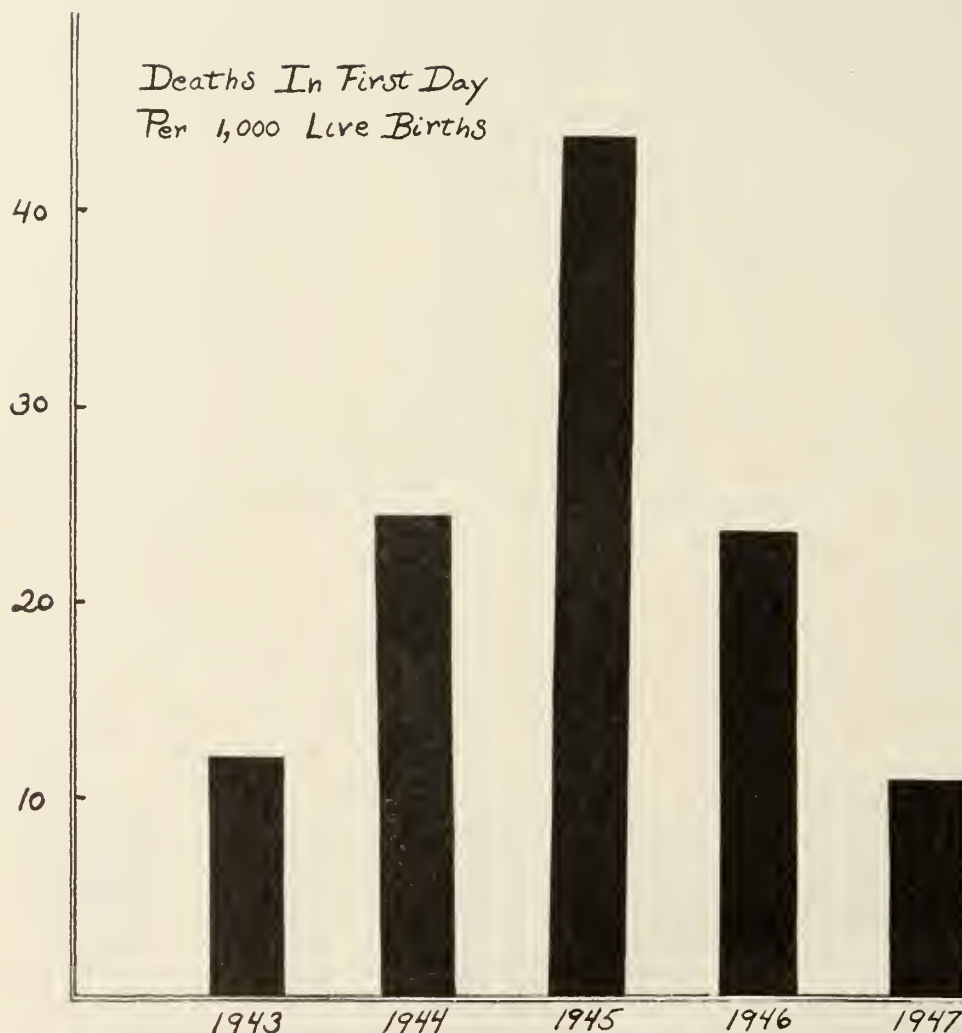
Maine General Hospital

CHART #3



Deaths Per 1,000 Live Births

CHART #4



U.S.A.

Of these neonatal deaths (first 24 hours) only one case would appear to have received overmedication, as you can see from protocol. This case received $14\frac{1}{2}$ gr. Tuinal, 400 mg. Demerol, and $\frac{1}{4}$ gr. morphine all within five hours of the time of delivery.

There are also two questions that come to mind concerning both of these groups of cases. Of the 15 stillbirths in this hospital (corrected figure), all cases received ether anesthesia in addition to the pre-delivery medication. This was also true of all cases of neonatal death except for one case which received sodium pentathol, and this case was discarded in figuring the corrected ratio, because the period of gestation was $5\frac{1}{2}$ mos. No case in either group received spinal or local anesthesia.

The records concerning the Foetal Heart are either vague or incomplete in stating accurate times in relation to the beginning of fetal embarrassment and delivery of child. However, from our protocol it may be seen that in nearly all cases the management of labor was well and conservatively handled, and with one exception, I do not believe that delay in delivery was an important factor in either group of cases.

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CLINICO-PATHOLOGICAL EXERCISE

Case presented at Maine General Hospital, Portland, Maine

Discussed by CHESTER KEEFER, M. D.*

Edited by JOSEPH E. PORTER, M. D.

This 21-year-old white married housewife was admitted with a chief complaint of weakness of the legs. About three years before admission, while working in a bakery, the patient's hands became clumsy and she had difficulty in controlling their movements; this lasted for 2-3 days. Because of this she saw a physician, who started treating her sinuses and gave her fever treatments. At that time she weighed 105 lbs., but began to lose weight. Her stomach became upset, she vomited frequently, and "felt terrible." One year before admission she became deaf, and at the same time her legs felt weak and she began to walk with them far apart. She could not make them work properly. She developed insomnia. At about this time she went to California, where she was married; she was homesick and her weight dropped to 85 lbs. The insomnia became progressively worse, and she developed visual hallucinations, which would persist until the light was turned on and she was comforted by her husband. As a girl she had suffered from nightmares. She was seen by a physician while in California, but no diagnosis was made. She returned to Portland approximately 6 months before this admission, when her weight was 72 lbs. She was apprehensive and afraid to ride in an automobile. Her appetite was somewhat better, but her intake was far below normal. Her bowels had been regular. There had been no urinary symptoms.

Past History: She had had measles and whooping cough; no surgery.

Family History: Father age 51, mother 50, brother 16, all living and well. Husband age 25, living and well. Familial disease: Tuberculosis, one uncle, cancer in one grandfather.

Review of systems revealed her periods to have been irregular since the onset of her present illness; catamenia at age of 13; usually flowed 5 days. Habits: Smoked 10 cigarettes per day. Had convulsions as an infant. Remainder of systems negative.

Physical Examination: Temperature 98°, pulse 124; blood pressure right arm 125/100; left arm 125/100. Weight 73 lbs. Height 5 feet, 2 inches. A poorly-developed, emaciated girl, coöperative, moderately intelligent, hard of hearing. Head not re-

markable. Ears: Partially deaf. Neck thin; thyroid not enlarged; no masses. Eyes: Pupils equal and active; lens and media clear; disc margins distinct; vessels show no abnormalities, hemorrhage or exudate. Teeth well-kept. Tonsils present but not diseased. Chest emaciated; breast tissues present. Heart: Apex beat 5th interspace, 2 cm. inside mid-clavicular line; rate 124; rhythm regular; sounds hyperactive; no murmurs. Lungs clear to percussion and auscultation. Abdomen emaciated; patient unable to relax; abdominal muscles spastic. Extremities: Peripheral arteries soft; good pulsation both femorals and dorsalis pedis arteries; no varicosities, edema, or tremor. Reflexes hyperactive throughout. Vibratory sense present bilaterally. Vaginal examination: One finger admitted with ease; cervix normal. Uterus not felt, as patient was unable to relax.

Laboratory Work: Blood count: Red blood cells 4,280,000; hemoglobin 90%, 13 gms.; white blood cells 13,000; 67% polys; 25% lymphocytes; 5% monocytes; 3% eosinophils. Moderate variation in size and shape of RBC. Urine: Specific gravity 1.009; albumin 40 mg.; light green to Benedict's; 10-14 RBC.; 4-5 WBC. in sediment. Basal metabolism rate -2%. Blood urea nitrogen 16 mg.%. Cholesterol 133 mg.%. Fishberg test: first hour 1.008, albumin 20 mg.; second hour 1.006, albumin 20 mg.; third hour 1.004, albumin 20 mg. Intravenous P.S.P. test: 6% excretion of dye in 1½ hours. Total protein 6.82 gm.%; albumin 4.5 gm.%; globulin 2.2 gm.%. Alkaline phosphatase 3.5 units; phosphorus 4.2 mg.%; calcium 13 mg.%. Sedimentation rate (Wintrobe): corrected 17 mm./hr. The glucose tolerance test revealed: Fasting 105 mg.%; 1 hour 170 mg.%; 2 hours 200 mg.%. Repeated glucose tolerance: Fasting 85 mg.%; 1 hour 84 mg.%; 2 hours 215 mg.%. Repeated P.S.P. test on the 7th hospital day revealed excretion of 8% dye in 1½ hours. Sulkowitch test for urinary calcium: Calcium present but not increased. On the 10th hospital day blood urea nitrogen was 36 mg.%; calcium 11.7 mg.%; phosphorus 4.5 mg.%; alkaline phosphatase 1.6 mg.%. CO₂ combining power 50.2 vol.%. Serum chlorides 109 milli-equivalents/liter.

X-ray: Skull, A-P and P-A views, showed nothing abnormal, other than for calcification of the falx; the sella was entirely normal; the clinoid processes were normal; pineal not calcified. Plain

* Professor of Medicine, Boston University Medical School.



plate of the abdomen showed a shadow of increased density in the left upper quadrant, in the region of the left kidney. Fluoroscopic examination of the esophagus was normal. X-rays of the feet, legs, arms, and hands revealed flecks of calcification in the soft tissue and linear calcium deposits in the blood vessels. In the cortex of the long bones there were patchy increased deposits of calcium. EKG revealed rate of 90, PR interval 1.8, QRS complex 0.1 sec.; auricular premature beats; QT 0.34 sec.; P waves broad and double at top in leads 2 and 3; slight ST elevation in lead 1 and 2; QRS upright in 3 limb leads; T waves upright and of normal value in limb leads; precordial lead normal except for slight ST elevation.

Subsequent History: Three years before admission patient developed a severe sunburn, which was followed by chills and swelling of her legs above the knees; this subsided quickly, as did the sunburn. Three weeks following this her hands began to ache, and the joints of her fingers were a little swollen; her hands were clumsy and she dropped things. This lasted 2-3 days and went away. At this time she saw a physician, who felt she had neuritis, and gave her injections. A few days later he changed his diagnosis to arthritis; he thought it was probably due to sinus trouble, and started treatment, although the patient had no symptoms referable to the sinuses. The patient was given sprays and irrigations for one month, together with nose drops every 3 hours. She began to lose weight and appetite; subsequently nausea and vomiting occurred; her jaws began to ache. At this time she had an impacted wisdom tooth extracted. Vomiting became constant; she entered another hospital, where intravenous therapy was given, together with low fever treatment. For the next three months she had fever treatments; she became extremely nervous and anxious. High fever treatments were then instituted for a 3-months period.

At this time she started taking large, jelly-like capsules twice daily, which she continued to do for the next two years, or until her admission to this hospital.

Her course in the hospital was uneventful. Her vital signs remained normal, and she was discharged on the 12th hospital day.

DISCUSSION

Dr. Jack Spencer: Large films of the abdomen show two areas of calcification: one in the region of the left kidney, and one in the right kidney, measuring approximately 1 cm. in diameter. In addition you see floccular flecks of calcification in the region of the left lower calyces, having the appearance of calcification in the kidney pelves. Film of the lower extremities demonstrates a floccular deposit of calcium in the fornix and encroaching upon the medullary cavity. In addition, the blood vessels show marked calcium deposits, and also films of the thigh show calcium deposits in the femoral arteries. Bones of the feet show irregular floccular deposits of calcium about the margin of the tibial bones. Calcification of the ligaments, and the intima of the blood vessels, showed calcium deposits. The upper portion of the esophagus was studied with spot films, hypopharynx demonstrated. Upper third of the pharynx showed no deformity or extrinsic pressure.

Physician: Do you think the bones showed any decalcification?

Dr. Spencer: Increase in calcium deposit.

Dr. Keefer: In summary this patient presents a most interesting history. First of all, she is 21 years of age.

We are told that three years before admission she noticed that she had difficulty in controlling the movements of her hands. For this she was treated

with fever therapy and for sinusitis. She vomited frequently. One year before admission (2 years after onset of illness), she became deaf and the legs began to show weakness and she walked with a wide base. She developed insomnia, continued to lose weight and develop psychic disturbances. The physical examination showed slight diastolic hypertension, emaciation, deafness, tachycardia, no anemia, slight leucocytosis, urine—low specific gravity with albumen, low PSP excretion. Normal protein in blood, normal alkaline phosphatase and phosphorus, hypercalcemia, no increased excretion of calcium. B.U.N. was increased, no acidosis. X-rays showed calcification of falx, calcification in region of left kidney, calcification in soft tissues and blood vessels and in kidney. In brief then, we have a young woman who had been ill for three years. An illness that began with pains in the hands. She received fever therapy. Later, she had GI disturbances, psychic disturbances, deafness, signs of renal insufficiency, weakness and loss of weight, hypercalcemia and calcification in the tissues and blood vessels. What then was the cause of the calcification in the tissues associated with renal insufficiency and hypercalcemia? Was this an example of calcinosis universalis? The symptoms of her illness began soon after an episode of sunburn and there were chills accompanying it. Then there was clumsiness and weakness of the extremities. Later, calcium deposits were found in the tissues by X-ray. Of importance, however, are the lack of any changes in the skin which accompanies this disease, also the presence of renal insufficiency and the presence of calcification in the blood vessels. Also there was a hypercalcemia that is extremely uncommon. I am inclined to dismiss this diagnosis from serious consideration. In most cases, this disorder occurs in the young, is most often associated with scleroderma, dermatomyositis, myositis ossificans. It is characterized by periodic bouts of fever and signs of inflammation in the skin and subcutaneous tissues and the final deposit of calcium therein. Stiffness and contractions of the muscles and joints follow. There is a normal calcium and phosphorus and normal phosphatase. The internal organs usually escape damage, renal function is normal and the vessels do not show premature calcification. Therefore, I dismiss this diagnosis.

Was this primary hyperparathyroidism? Well, this patient had hypercalcemia, renal insufficiency, deposits of calcium in the kidney and soft tissues. She was weak and had lost weight. She had symptoms referable to her gastrointestinal tract. Yes, she had deafness which occasionally occurs late in the disease. However, the blood phosphorus was low, the phosphatase was normal. The X-rays of the bones show no generalized decalcification or cysts and there was no excessive excretion of calcium in

the urine. I should be inclined, therefore, to dismiss this diagnosis from serious consideration.

Was the disease due to secondary hyperparathyroidism, i.e. secondary to renal disease, the so-called osteitis fibrosa cystica of renal origin? That she had renal insufficiency and deposits of calcium in the blood vessels and tissues there is no doubt. So that it must be considered seriously. However, the hypercalcemia, the normal phosphatase, the normal phosphate, and the absence of acidosis, force one to dismiss this diagnosis. Usually, patients with secondary hyperparathyroidism due to renal disease show decalcification of the skeleton with metastatic calcification, a normal or reduced calcium, an increased blood phosphorus and phosphatase. So I am not going to discuss this disease.

What other disorders might produce metastatic calcification and renal failure. One might mention myeloma, bone tumors, osteosclerosis, leukemia. Well, I don't believe we need consider any of these diseases seriously. Moreover, we don't need to consider the hypercalcemia associated with alkalosis, and metastatic calcification associated with renal insufficiency such as one encounters rarely in patients with obstructing duodenal ulcers, excessive vomiting, and the excessive ingestion of milk and alkalies. The history excludes this condition. I have excluded a number of conditions that I am certain you have considered. I have not made any positive statement so far concerning my final diagnosis of the case. The time always arrives when this becomes necessary. I am of an opinion that this is a therapeutically induced disorder. What therapeutic agent then can produce loss of weight, nausea, vomiting, deafness, weakness, psychic disturbances, hypercalcemia, renal insufficiency, metastatic calcification in the blood vessels, kidneys and soft tissues, a normal blood phosphorus and a normal blood phosphatase. On the second page of this record we read that this patient had taken large jelly-like capsules twice daily which she continued for two years. Here are some capsules. These capsules contain large amounts of Vitamin D, so that I believe we should review briefly what might happen to patients who take excessively large amounts of Vitamin D over a long period of time. We know, for example, if large amounts of Vitamin D are administered to either animals or men, and particularly if the patient is not very active and is kept in bed, or if he takes these capsules in milk, he is likely to develop hypercalcemia. The amount of calcium excreted in the urine will be increased, and the amount absorbed in the GI tract will be increased. The following are symptoms associated with the hypercalcemia. Symptoms of renal damage appear so that patients often have nocturia, albuminuria and hematuria. They then may develop GI

symptoms with anorexia, nausea, vomiting and diarrhea. The general symptoms include weakness, lassitude, headache and itching of the skin. So then, we have the symptoms referable to three different systems—GI tract, GU tract and general symptoms. The signs of this intoxication that are often recorded are weight loss, pallor, occasionally deafness and psychic disturbances; insomnia is reported very frequently. Associated with the renal insufficiency there may be a grayish-brown pigmentation of the skin, even an exfoliative type of dermatitis has been recorded in some patients. Associated with renal insufficiency and the hypercalcemia, deposits of calcium occur in various tissues, particularly the kidneys, stomach, lungs, arteries and muscles and the subcutaneous tissues. One other very interesting finding is a so-called Band Keratitis, deposits of calcium in the cornea, and conjunctivae, seen only with a slit lamp. The lesions are tiny glass beadlike and stand out like little dew-drops when you look at them under a slit lamp. In the literature one sees these lesions called Band Keratitis by the ophthalmologist, and this has been described in patients with hypercalcemia, hyperparathyroidism, Vitamin D intoxication, some instances of sarcoid with hypercalcemia, and elevation of the globulin in the blood. Now the laboratory findings in this disorder are essentially those of a hypercalcemia. The phosphorus and phosphatase in the blood were normal. There is commonly nitrogen retention, PSP is reduced and a number of patients have developed anemia. I have already mentioned the findings by X-ray in which you have excessive calcium deposits in the tissues of the kidney and blood vessels. In a few instances there has been reported some decalcification of the bones. In view of the history of this patient who had the disorder diagnosed as arthritis, neuritis, for which she received fever-therapy, took two large jelly-like capsules a day for two years, then the development of nausea, vomiting, weakness, lassitude, weight loss, psychic disturbances, difficulty in walking and finally renal insufficiency associated with hypercalcemia and metastatic calcification, my final diagnosis would be Vitamin D intoxication with hypercalcemia and metastatic calcification. Fortunately most of these patients recover if they are taken off Vitamin D and given low calcium diet. Calcium depots in the tissues frequently disappear. Calcium is excreted in the urine. So it would not surprise me if this patient got along very well in the future on a low calcium diet, provided she was kept on a very low Vitamin D diet as well.

Dr. Porter: Instead of giving the usual summary of this case, I am going to ask Dr. Ralf Martin, whose case it was, to briefly comment on it.

Dr. Martin: Dr. Keefer has made only one error, and that is the brand of Vitamin D which was

used. I really have nothing to add. Each capsule contained 200,000 units of Vitamin D, which was approximately 400,000 units a day over a period of approximately two years. I might add a few words as to her subsequent course, which has been rather favorable. All medications were stopped, she was placed on diet low in calcium, and slowly but progressively improved. Her renal function is slightly increased over what it was, and she has gained approximately six pounds in weight. She is now a relatively useful individual, completely takes care of her house, has lost her fear of going out at night. Psychic disturbances are practically all gone. Where previously she was unable to walk without assistance of at least one person, she now makes a practice of attempting to walk from two to three miles each day. There were many things in the history and physical examination which were impossible to put in because of the tremendous history that she had. Interesting to me was the apparent spastic condition of her muscles, and inability to put her heel on the floor. Muscles in back of the heel were quite tight and appeared to be contracted. She is now able to wear a lower shoe and areas on the bottom of the foot which were quite hard have begun to soften up a little. Interesting to me was whether or not this girl had impaired renal function before this was started. She had nocturia two or three times a night, dating back many years. It has interested me particularly that Vitamin D is tolerated in very large doses if they have normal renal function, but it does not take nearly as high doses of Vitamin D if there is a certain amount of renal damage already present. I am particularly interested in Dr. Keefer's remarks that these individuals do well if Vitamin D is omitted and they are placed on low calcium diet, because some people are not quite so hopeful because of the extensive cellular damage which takes place throughout the body, which is easiest to demonstrate in the renal tissues. There have been several who have placed a very black future on these patients, because they felt that the renal tissue was destroyed by this encroaching process.

Dr. Porter: I would like to ask Dr. Keefer a question. Do you know whether weight loss and emaciation are entirely due to failure to eat or increased metabolic activity?

Dr. Keefer: I don't know that I can answer that question with any degree of certainty. It is understood by those who have studied this disorder that the weight loss in many cases is due to loss of appetite, nausea and vomiting, and also to a disturbance or increase in fat metabolism, although there is very good evidence brought forth to show there is a disturbance in fat metabolism also. The question that Dr. Martin raised that cellular damage is from Vitamin D in large amounts is one in which investigators

THE PRESIDENT'S PAGE

Our mental habit of planning activities by seasons finds us just turning another corner into the fall and winter. With the summer vacations behind us and school beginning for the younger members of the family, we rather naturally think of our own schedule of medical meetings and winter clinics.

Medical conventions are the cheapest and easiest form of graduate education now available. We have been accused of wanting to be "spoon fed." Perhaps so;—but surely the stimulation to be obtained from attendance at clinics and medical lectures far outweighs any criticism of the method of receiving the obvious benefits.

First come the hospital staff meetings. Attendance is not only a requirement of continuing membership, but also the first step in harmonious coöperation with our medical colleagues.

Next the County meetings. Here we must discuss many questions of importance to the county and the Maine Medical Association. Remember the House of Delegates next June will be successful only if backed by a year of fruitful activity among the members of the County groups.

The Fall Clinical Session of the Maine Medical Association will be held this year in Portland, on November 1 and 2. This session should be largely attended.

Later in the same week the New England Post-graduate Assembly will meet in Boston. The growth of these meetings has been remarkable, and attendance from Maine doctors is much desired this year.

These are but the beginnings of a big year of post-graduate opportunities. Every doctor in Maine should so plan his schedule that a generous time be allowed for interesting and stimulating medical contacts.

FORREST B. AMES, M. D.,
President, Maine Medical Association.

EDITORIALS

FALL CLINICAL SESSION — PORTLAND, MAINE

November 1st and 2nd

Ralf S. Martin, M. D., of Portland, has been appointed Chairman of the Program Committee for the Fall Clinical Session of the Maine Medical Association, which is to be sponsored by the Cumberland County Medical Society. The session is to be held in Portland, Monday and Tuesday, November 1 and 2.

Tentative plans are to hold meetings each morning at the Maine General Hospital, Maine Eye and Ear Infirmary and Mercy Hospital. At the Maine General Hospital the Medical and Surgical Services will be in charge of the programs. The Mercy Hospital plans to hold clinics on Traumatic and Orthopedic Surgery. The Maine Eye and Ear Infirmary will present clinics on problems of the eye, ear, nose and

throat, which are of interest to the general practitioner.

The afternoon programs will be filled with subjects of particular interest, and highlighted with out of town speakers of national reputation.

There will be a banquet on Monday evening, November 1st—the committee plans big things for this one evening program of the session.

A copy of the complete program will be sent to each member of the Association in addition to its publication in the October issue of the JOURNAL — so be on the lookout for it, and take time right now to mark these dates on your calendar, "Must Attend Clinical Session in Portland."

PROCEEDINGS — NINETY - FOURTH ANNUAL SESSION HOUSE OF DELEGATES

The first installment of the Proceedings of the meetings of the House of Delegates held during the Ninety-fourth Annual Session, at Poland Spring, June, 1948, which are to be published in part in the

JOURNAL, appears elsewhere in this issue.

The complete report of these meetings is on file in the Association's office at Portland and is available to any member of the Association.

SURGEON GENERAL EXTENDS TRAINING PROGRAM LIMIT

The Army Medical Corps has extended until November 1 its time limit for medical school graduates to apply for commissions under the Civilian Resident and the Civilian Intern Training Program.

Widespread interest in the program necessitated the decision by Major General Raymond W. Bliss, Surgeon General of the Army, to extend the time limit from July 1.

Under the program, selected individuals serve out their internships and residencies in civilian hospitals of their choice — interns as first lieutenants of the Medical Corps Reserve and residents as first lieutenants in the Regular Army Medical Corps. Both receive full pay and allowances of their rank, plus \$100 a month professional volunteer bonus. Both complete their training just as they would as civilians.

Upon completion of their year's training, interns must apply for Regular Commissions and may qualify for residency training. Residents may continue their residency training upon concurrence of the hospital with a view to qualifying for specialty courses

leading to certification by American Specialty Boards. Here the Graduate Training Program meets the Career Management Program under which medical officers are assured of continuation in their chosen specialties during Army service unless they choose administrative or staff careers.

Officers who participate in these programs are expected to serve a year of a active duty for each year of training they receive.

The Graduate Training program was instituted by General Bliss with the advice and help of the American Medical Association, the Society of Consultants of World War II and other medical organizations, to help bring Army medicine into closer contact with civilian medicine. Superintendents and chiefs of professional services in great civilian teaching hospitals have indicated their wholehearted indorsement of the program. Many of these chiefs now serve also as consultants to the Surgeon General and make regular teaching visits to Army hospitals.

NECROLOGY



CAT.

CAT.

Walter Nathan Miner, M. D.
1872 - 1948

Walter Nathan Miner, M. D., was born at Mount Whatley, N. B., in 1872, the son of Nathan and Celia Carter Miner. He attended the schools in his home town, graduated from Fredericton Normal School and taught for a time after his graduation.

Continuing his education, he was graduated from Baltimore Medical School, then took an advanced course at Johns Hopkins University, later followed by work at Guy's Hospital in London, England, and the University of Edinburgh.

In 1899, he began the practice of medicine in Calais, ministering to many on both sides of the St. Croix River. Later, he established his own hospital which he continued until 1946, when he presented it to the City of Calais.

Doctor Miner was a Fellow of the American College of Surgeons, a member of the American, Maine and New

Brunswick Medical Associations, and the Washington County Medical Society.

He was very active in the affairs of his city and worked hard for its development. At one time he served as Mayor and for thirty years was president of the Calais Chamber of Commerce.

He was one of the original executive directors of the New England Council and chairman of the Super-highway committee.

He married Miss Estella Delahay, of Baltimore, who died in 1929. In 1930, he married Miss Hannah Harris, of Scranton, Pa., who survives him.

Also surviving are three children and five grandchildren.

WALTER J. GILBERT, M. D.

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COUNTY SOCIETY NOTES

Piscataquis

A meeting of the Piscataquis County Medical Association to which the Aroostook, Somerset, Penobscot and Kennebec County Medical Associations were invited, was held at Squaw Mountain Inn on July 28th with fifty-seven members and guests present.

Charles Burnett, M. D., Assistant Professor of Medicine at Boston University Medical School, presented a very interesting and instructive lecture on "Changing Concepts of Parenteral Fluid Administration."

In the evening a very fine dinner was served. President Forrest B. Ames, President-elect Ralph A. Goodwin, and Secretary Frederick R. Carter, spoke on Medical Association matters, problems and programs.

There was a great deal of singing by the choral group, which all enjoyed immensely. A charming accordionist played many selections which everyone enjoyed, even our sedate State Association executive secretary.

N. H. NICKERSON, M. D.,
Secretary.

Somerset

The annual meeting of the Somerset County Medical Association was held at Lakewood, Maine, on August 17, 1948. The meeting was brought to order by the President, Dr. George E. Sullivan. The following speakers were introduced: Dr. Milan Chapin and Dr. Waldo Clapp, both of Lewiston. These speakers presented a panel discussion on "Medical Disorders of the Thyroid Gland."

Following this discussion the following officers were elected for the coming year:

President: Maurice E. Lord, M. D., Skowhegan.

Vice President: Walter S. Milliken, M. D., Madison.

Secretary-Treasurer: Edwin M. Lord, M. D., Skowhegan.

Board of Censors: Drs. Henry E. Marston, Maurice S. Philbrick, and Howard L. Reed.

Program Committee: Drs. Richard P. Laney, H. Carl Amrein, and Harland G. Turner.

Delegate to the Maine Medical Association: George E. Sullivan, M. D., Bingham. Alternate: Howard L. Reed, M. D., Skowhegan.

H. CARL AMREIN, M. D.,
Secretary.

NEWS AND NOTES

Appointed State Hospital Head

Israel Zeltzman, M. D., of the Togus Veterans' Administration Hospital, has been appointed Superintendent of the Bangor State (Insane) Hospital by Governor Horace A. Hildreth and the Executive Council.

He will succeed Carl J. Hedin, M. D., who will retire October 1st. Dr. Hedin has been superintendent at Bangor for 29 years.

Dr. Zeltzman is a graduate of Tufts College Medical School. He has worked in neuro-psychiatry at the Foxboro (Massachusetts) State Hospital and was senior physician at the Boston State Hospital.

He served in the army at Fort Devens, Massachusetts, Presque Isle, Maine, and Morrison Field, Florida, and has served at Togus one year.

Appointed County Medical Examiners

Edward Thegen, M. D., of Bucksport, and Henry F. Smith, M. D., of Jackman, have been appointed County medical examiners by Governor Horace A. Hildreth and the Executive Council.

Second Annual Interim Meeting American Medical Association

Registrations and hotel reservations are now being accepted for the second annual Interim Meeting of the American Medical Association at St. Louis, November 30, to noon, December 3, 1948.

On the eve of the Interim Meeting, Saturday, November 27, the first national Medical Public Relations Conference will be held under sponsorship of the A. M. A. at the Statler Hotel.

Planned to be especially valuable to the general practitioner, the Interim Session will offer lecture meetings, conducted by medical leaders on conditions most often seen in daily practice. Subjects to be discussed include diabetes, heart disease, cancer, poliomyelitis, obstetrics, pediatrics, dermatology, genito-urinary conditions, hypertension, anesthesia, tuberculosis, jaundice, laboratory diagnosis, X-ray diagnosis, and physical medicine as applied to the treatment of arthritis.

Diagnosis and treatment will be stressed in a wide variety of clinical conferences, which will be correlated with the lecture meetings. Leading practitioners from all sections of the nation will conduct these conferences.

Evening programs will feature distinguished speakers, the award of the general practitioner medal, and fun. Entertainment will be provided, free of charge to physicians and their guests of course, by stars of the amusement world.

A scientific exhibit with nearly 100 displays will show clinical and pathological material on subjects dealt with in the clinical conferences.

Approximately 115 leading firms will display technical exhibits, which will include new products, equipment, and medical publications. All exhibits will be open from Tuesday at 8.30 a. m., to Friday noon, November 30 to December 3.

Papers will be read at the General Scientific Meetings in the St. Louis Opera House from 9.00 to 10.00 a. m., and from 2.00 to 3.00 p. m. each day. At least six demonstration units are planned for each half day in the Scientific Exhibit from 10.30 a. m. to 12.00 noon, and from 3.30 p. m. to 5.00 p. m. Small rooms will be provided for these demonstrations and provision is being made so that physicians can take all the notes they wish in comfort.

Intermissions in the program will be from 10.00 to 10.30 a. m., 12.00 noon to 2.00 p. m., and 5.00 p. m. to 6.00 p. m. each day.

Officers and members of the House of Delegates will stay at the Statler Hotel. Those attending the Medical Public Relations Conference will stay at the Lemox Hotel.

A registration form which enables the physician to save time by securing a registration card in advance is appearing in *The Journal of the American Medical Association* every other week until the Interim Meeting. A convenient blank for making reservations at a number of St. Louis' best hotels, which are within easy walking distance of the St. Louis Auditorium, is also printed in *The Journal*.

All reservations must be cleared through the Chairman, Sub-committee on Hotels, American Medical Association, Hotel Reservation Bureau, 1420 Syndicate Trust Building, St. Louis 1, Mo., and must be received before November 9, 1948.

American Board of Ophthalmology

Candidates for the certificate of the American Board of Ophthalmology are accepted for examination on the evidence of a Written Qualifying Test. These Tests are held annually in various parts of the United States.

Registration is already closed for the next Test to be given in January, 1949.

Applications are now being accepted for the 1950 Written Test. They will be considered in order of receipt until the quota is filled.

PRACTICAL EXAMINATIONS FOR ACCEPTABLE CANDIDATES 1949

San Francisco	March 21-24
New York	June 11-15
St. Louis	October 15-19
Boston	December

A supplementary list of diplomates from January, 1948-January, 1949, will be sent without charge to all purchasers of the Board's Directory. This supplementary material is arranged alphabetically and geographically. No biographical material is included.

IMPORTANT: Diplomates are urged to keep the Board office informed of all changes of address.

OFFICERS FOR 1949

Chairman, Dr. Frederick C. Cordes, San Francisco, California.

Vice-Chairman, Dr. John H. Dunnington, New York City, New York.

Secretary-Treasurer, Dr. S. Judd Beach, Cape Cottage, Maine.

Assistant Secretary, Dr. Edwin B. Dunphy, Boston, Massachusetts.

EXECUTIVE OFFICE, CAPE COTTAGE, MAINE

The Foundation Prize

"The South Atlantic Association of Obstetricians and Gynecologists announces the establishment of 'The Foundation Prize.' Authors of papers on Obstetrical or Gynecological subjects desiring to compete for the prize may obtain information from Dr. E. D. Colvin, Secretary-Treasurer, 1259 Clifton Road, N. E., Atlanta, Ga."

Announcement of Van Meter Prize Award

The American Goiter Association again offers the Van Meter Prize Award of Three Hundred Dollars and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The Award will be made at the annual meeting of the Association which will be held in Madison, Wisconsin, May 26th, 27th, and 28th, 1949, providing essays of sufficient merit are presented in competition.

The competing essays may cover either clinical or research investigations; should not exceed three thousand words in length; must be presented in English; and a typewritten double spaced copy sent to the Corresponding Secretary, Dr. T. C. Davison, 207 Doctors Building, Atlanta 3, Georgia, not later than March 15th, 1949. The committee, who will review the manuscripts, is composed of men well qualified to judge the merits of the competing essays.

A place will be reserved on the program of the annual meeting for presentation of the Prize Award Essay by the author if it is possible for him to attend. The essay will be published in the annual Proceedings of the Association. This will not prevent its further publication, however, in any Journal selected by the author.

Clinico-Pathological Exercise—Continued from page 262

have taken sides. There are those who feel that all of the symptoms can be accounted for by the hypercalcemia and that one does not necessarily have to assume that there is first tissue damage and then deposit of calcium in the damaged tissue. If you poison dogs with Vitamin D, you get hypercalcemia and have destruction of kidney cells, and they die before they get metastatic calcification. That has been interpreted by some groups, particularly Reed and Worth in Chicago, as indicating that there is tissue damage followed by deposits in damaged tissue. On the other hand, if you study cases in which there has been a fracture of bone, and the patients have been kept in bed and given a high calcium diet, large amounts of milk and Vitamin D, they develop signs of metastatic calcification in these patients. It is well to note, as you know from cases that have been published, that the excessive calcium remains in the circulating blood for weeks after the Vitamin D has been withdrawn, sometimes 6, 8, 10, or 12 weeks. Also, renal function is decreased a considerable time after withdrawing Vitamin D, but in the few patients that have been followed, the renal function has finally returned to normal, so that I am rather attracted to the idea that perhaps the hypercalcemia itself may be responsible for many of the symptoms that one sees; and a person may have tissue damage as a result of hypercalcemia alone. That is a point that can be argued; but if one can take sides, I would like to vote for that side.

Dr. Porter: It has been stated that calcium is deposited where the tissues are more likely to be alkaline. That would occur in the stomach, lungs, liver, blood vessels, and in hemorrhages. The lungs and the intima are alkaline.

Dr. Keefer: One other possible explanation: those are the organs that have the highest content of phosphatase. In intima of lungs, blood vessels of stomach and in the other tissues mentioned supersaturated solutions of calcium phosphates are made and contribute to the deposits of the calcium salts.

Dr. Porter: What about the liver?

Dr. Keefer: In some cases of calcinosis, the liver

may be very extensively involved, but I have never noted that calcium has been deposited in the liver in this disease.

Dr. Porter: Except near the vessels.

Dr. Keefer: Yes.

Physician: How about renal calculi? Don't they build up after Vitamin D has been drawn?

Dr. Keefer: I don't find any reports concerning renal calculi. Calcification has usually been in the tissues itself.

Dr. Martin: I might add, the last time I saw this young woman was in February, when she brought me a calculus which she had recently passed which looks to be about the size of the one in the left kidney.

Dr. Donald Daniels: I may have been confused by the history regarding the Vitamin D medication which was not given until about six months after she began her illness during which interval there seemed to be considerable disturbance, vomiting, anxiety, and loss of weight.

Dr. Martin: That is an error in the interpretation of the history. The Vitamin D was started at the same time as the diagnosis of arthritis was made, rather early in the history.

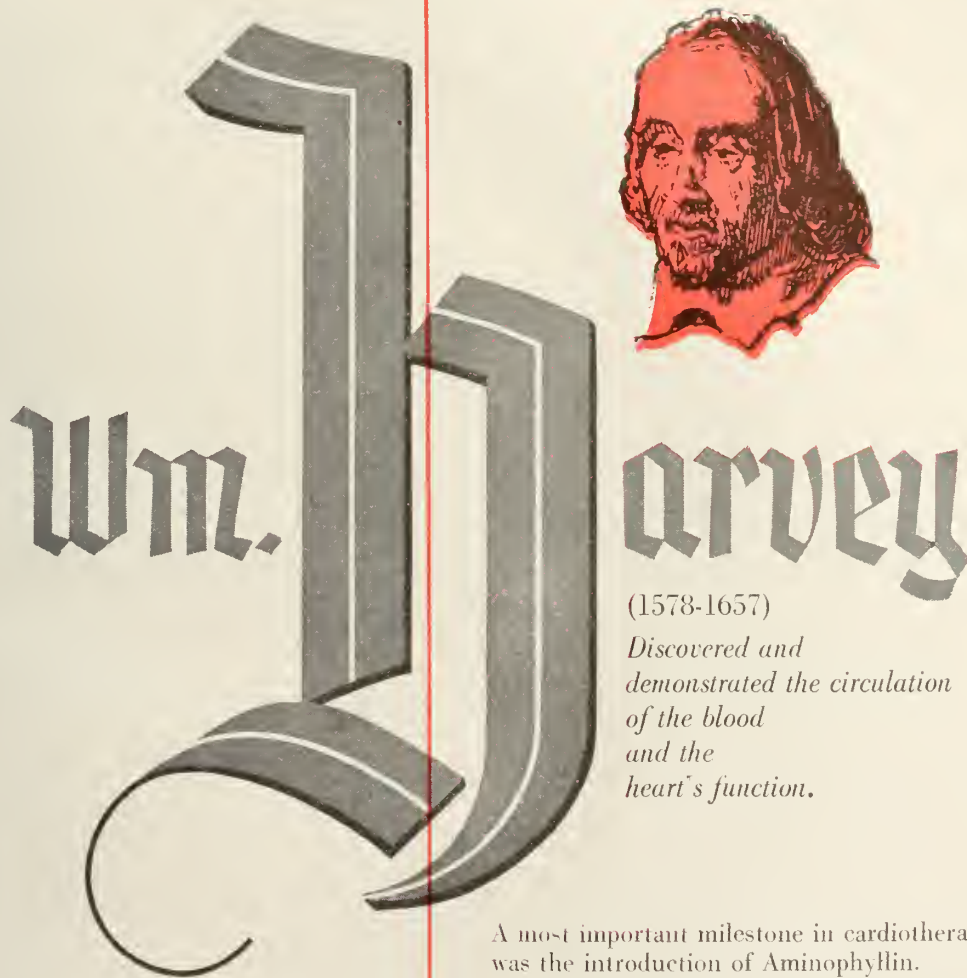
Dr. Richard Goduti: I want to take one exception; if I understood Dr. Keefer correctly, the Band Keratitis could only be seen with a slit lamp. This would rather discourage physicians from looking for it, because they cost somewhere around \$800. I believe that in a great many cases it can be seen with an ordinary flashlight. It has a rather characteristic appearance, thin grayish film near the limbus, or on either side of the limbus. The reason why it is deposited there is a little questionable. It is probably due to the fact that evaporation of the tears is higher in the exposed part of the eye. Not many things cause it — glaucoma is one. However, it is much easier to see with a slit lamp than it is with a flashlight.

Dr. Porter: Thank you, Dr. Keefer, for presenting this very interesting case so clearly.

It is short-sighted to spend a great deal of time and money in developing an excellent medical program for the treatment of tuberculosis patients without at the same time providing some form of supervised activity for patients with a favorable prognosis to enable them to bridge the gap between the sheltered life in a sanatorium and the life of the work-a-day world.—Ernest S. Mariette, M. D., *Am. Rev. Tuberc.*, Jan., 1947.

Even if not more than two-thirds of the cases of erythema nodosum are associated with a tuberculous primary infection, it is obvious that every tuberculin-positive case must be treated in private practice as a possible expression of tuberculosis until thorough examination has shown that this possibility can be ruled out. The best guide to the aetiological diagnosis seems to be the vesicular tuberculin reaction.—Hans Jacob Ustvedt, M. D., *Tubercle*, Dec., 1947.

MILESTONES IN CARDIORESPIRATORY HISTORY



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Proceedings

NINETY-FOURTH ANNUAL SESSION

Maine Medical Association House of Delegates

POLAND SPRING, MAINE

June 20, 21, 22, 1948

The First Meeting of the House of Delegates of the Maine Medical Association convened at the Poland Spring House, Poland Spring, Maine, at 3:15 o'clock on Sunday afternoon, June 20, 1948, with Dr. Forrest B. Ames of Bangor, President-elect of the Association, presiding.

CHAIRMAN AMES: Gentlemen, I will call this first meeting of the House of Delegates for the 94th Annual Meeting of the Maine Medical Association to order.

The first item of business is the roll call, to determine the attendance of delegates and qualified alternates.

[The roll was then called by Secretary, Dr. Frederick R. Carter.]

CHAIRMAN AMES: I am glad to say that we have 31 delegates, or qualified alternates present. The quorum is 10; therefore, the meeting is officially opened.

[At this point, the Chairman asked the delegates to sit up front, and to one side.]

CHAIRMAN AMES: With reference to why I asked you gentlemen to sit in a body here, I know that you know this is a democratic group. You are the working men who have been designated, officially, by your own county societies, to come here and talk over the business of the Association. The floor of this meeting of delegates will be opened, by courtesy, to any other person present who might wish to speak, but of course, it is understood that the initiation of motions and the voting on the motions can be done only by the properly elected delegates. I only wish to say this: I want you to feel perfectly free, in spite of the fact that I have shifted the starboard to port, as the case might be.

In accordance with the by-laws of our Association, at this time I shall make two committee appointments. The first of these is a Reference Committee. You are familiar with the fact that certain matters may come before the House of Delegates, which perhaps might more wisely be temporarily set aside, until more consideration can be given to them. It is the purpose of our By-laws to have those matters referred to the Reference Committee, which will hold the necessary number of meetings between now and our delegates' meeting tomorrow, and at that time, make a report to the House of Delegates for final action on whatever the matter may be.

I shall appoint to that Committee, Foster C. Small of Belfast, as Chairman, Delbert M. Stewart of South Paris, Lawrence M. Cutler of Bangor, P. L. B. Ebbett of Houlton, and Harold E. Small of Augusta. Those men will consider themselves duly appointed, and hold the proper meetings and report tomorrow at the House of Delegates' meeting on anything which may come before them.

One other Committee I will appoint at this time is the Nominating Committee to draw up a slate of Standing Committees for 1948-1949. This committee will report to the House of Delegates, for the first order of business tomorrow afternoon. To that Committee, I have appointed James H. Crowe of Ellsworth, Chairman; Frank A. Smith of Westbrook, Lester A. Adams of Hebron, Paul A. Millington of Camden, Theodore E. Hardy of Waterville, Ralph C. Stuart of Guilford.

If there is time after the afternoon meeting, I will repeat the announcements, if it seems wise. This committee can hold its session and make up the proper slate, in order to expedite our business tomorrow.

At this time, Dr. Stephen A. Cobb of Sanford, our President, would like to take the floor and say a few words to you. [Applause]

PRESIDENT COBB: Mr. Chairman and Gentlemen. I want to thank you for all the work that you have done for me during this past year. As you know, this job as President cannot be done alone. I do want to extend my thanks to all of the members of the Association for the fine coöperation I have received, especially from the committees, who have done such painstaking work during the last year.

There are two things that I should like to put in the form of a motion, and I should like to refer them to the Reference Committee and get them off before the more serious business of the afternoon.

I think that we should have a Committee of the Association working with our Executive Secretary to revise and bring our Constitution and By-laws up-to-date, and I should like to make that as a motion and refer it to the Reference Committee.

This motion was duly seconded and was carried.

PRESIDENT COBB: The other thing that I should like to bring up at this time, is this. As you may or may not know, we are one of the few states in the Union that does not have a Ladies' Auxiliary. There has been a lot of pressure brought to bear on some of the women during the last year, and they are beginning to get enthusiastic, and I think that it would be a nice gesture on the part of the Maine Medical Association if we approved of the doctors' wives forming a Ladies' Auxiliary, within this Association.

Now, they can help us on a number of these questions that are coming up, especially in relation to legislation, child welfare, cancer drives and many other things.

Besides that, if they have an organization, they will have their own meeting at the time of our Annual Sessions, and will take care of their own entertainment which I want you to understand is quite a problem.

And so I move that this matter of the Ladies' Auxiliary be referred to the Reference Committee.

This motion was duly seconded and was carried.

CHAIRMAN AMES: The next item of business on our agenda is the report of the Chairman of the Council for the past year, Dr. Ralph A. Goodwin of Auburn.

Members and Delegates of the Maine Medical Association:

Among the various activities of the Council of this Association the chief duty is to oversee the carrying out of the suggestions, the mandates and the rulings of the House of Delegates.

These things the present Council of 1947 and 1948 has endeavored to do to the best of its ability.

The new business that was presented and acted on by the

House of Delegates in June of 1947 determined the responsibilities of the Council to a considerable extent.

The first item of new business related to the medical school. It was voted that we continue our committee activities to promote a medical school in Maine.

Secondly, it was advised after much discussion that we continue our committee activities on Prepaid Medical care and that we revise our methods to the point where we know what we do want in regard to a medical care program in the State of Maine.

Third, it was voted that a supplemental meeting of the House of Delegates be held at the Fall Clinical session. This in order to acquaint the delegates more specifically with the progress of the year's program.

Fourth, it was suggested after lengthy discussion that the Editorial Staff of the MAINE MEDICAL JOURNAL be increased by appointing an Associate Editor from each Councilor district and an Assistant Editor from each county. By bringing the editorial interest into each district and county it was hoped to improve the JOURNAL.

Fifth, it was voted that the House of Delegates register approval of the activities of the National Physicians' Committee.

Sixth, it was voted that the President of the Maine Medical Association be empowered to appoint a committee from this Association to work with the National Physicians' Committee.

To carry out these rulings and suggestions of the House of Delegates the Council has held five meetings since June of 1947.

The first meeting was on June 24, 1947. The second meeting on August 17. The third on November 9.

A detailed report of the business of these meetings was presented to the House of Delegates on November 9 at the Fall Clinical session in Lewiston.

The fourth Council meeting was held in Augusta on February 15, 1948.

1. At this meeting the new Editorial Board for the JOURNAL gave a comprehensive report of its plans.

2. The Scientific Committee reported in detail their progress on the annual program. They planned a departure from the usual meetings and conferences.

3. It was voted that the Maine Medical Association accept the contract between the Veterans Administration and the Associated Hospital Service of Maine with certain minor changes.

The fifth meeting was held June 20, 1948, at Poland Spring.

To report to you the progress achieved during this past year is to acquaint you with the activities of the various committees. An organization progresses in direct relation to its committee achievements.

The Council feels that the majority of the committees have been active and progressive. Their individual reports are published in the JOURNAL but I would like to mention the work of a few committees.

The Cancer Committee, Dr. McQuillan, Chairman, has submitted an encouraging report.

There are ten approved diagnostic clinics throughout the state. One new one has been added this year and two more are awaiting approval.

The deep X-ray clinics have doubled their work in the past year.

The committee recommends that funds be made available to approved clinics to meet expenses for more extensive studies on tumor clinic patients.

The Committee on Graduate Education, Dr. Joseph E. Porter, Chairman, has given some valuable recommendations.

First: A revision of the Editorial Staff of the JOURNAL was recommended and this has been carried out by vote of the Council.

Second: A change of the program of the annual meeting so that the meeting be more interesting to the general practitioner was recommended and this has been carried out by the Scientific Committee.

Third: Improvement of Hospital Staff meetings was also on their agenda.

These suggestions have proved valuable. The Council commends the activities.

The Tuberculosis Committee headed by Dr. Francis J. Welch gives a report on an analysis of the situation in Maine, the method of X-raying patients, and states that better reporting by physicians and an adequate number of field public health nurses would improve the program.

This shows that they are alert to the needs of the situation.

The Committee on Conservation of Vision; Dr. Howard Hill, Chairman.

This Committee reports the possibility of its acting as an advisory council to the eye program carried on by the Department of Health and Welfare. It advises against the use of antibiotics for ophthalmia neonatorum due to sensitiveness to the drug.

The Committee to study the Maine Medical School; Dr. Herlihy, Chairman.

The Committee has made definite progress in making a survey of the needs for a medical school in Maine. Two types of survey are underway, one from the professional point of view, the other through civilian channels as to their medical needs and whether more doctors are needed.

The Veterans' Affairs Committee; Dr. Harold R. Pressey, Chairman.

The Veterans' Affairs Committee has been active and has made valuable recommendations relative to the Veterans Administration and the Maine Medical Association.

They urge the adoption of the present contract by all members of the Maine Medical Association.

The Committee for the study of Prepaid Medical Care Plans; Dr. Eugene H. Drake, Chairman.

This Committee has been studying the problem for two and a half years. At the 1947 House of Delegates' meeting it was advised that we continue our committee activities on prepaid medical insurance and that we revise our methods to the point where we know what we do want in regard to a medical care program in the State of Maine. These were specific instructions to the Committee.

The Committee has carried out these instructions and its report has been sent to every member of the Maine Medical Association.

The Council feels that the Committee should be highly commended for its prolonged and difficult task.

A word of explanation as to why this Committee has been working on this problem may not be remiss at this time, as it is a very important question. From many quarters it is asked, "What do we want any insurance plan for anyway?"

In the first place, the Council and Officers of this Association did not initiate or sponsor or promote this idea, neither did the Committee. The proposal came from the American Medical Association three years ago. They made the request that each state society form some plan of Voluntary Medical Insurance to take the place of the proposed Compulsory Insurance plan advocated by the National Government, the idea being to keep the control of medicine in the local state and county organization rather than a centralized control from Washington. To this end the President of the Maine Medical Association at that time appointed this Committee.

The Editorial Board of the JOURNAL, with Dr. Eugene E. O'Donnell, Chairman, has been active and has made a progressive report on their new plans of editorship. This Committee is due high commendation.

The monthly reports of Mr. W. Mayo Payson, Executive Secretary, show that besides visiting various county societies and attending national meetings, he has been making a

thorough study of the National Proposed Medical Legislation. He has also made a survey of the State relative to the total number of doctors and of doctors needed in rural areas. This line of work from its very nature does not show up in the headlines but does show earnest and efficient effort.

To Summarize:

The general policy of this year's program has been to promote better and more efficient public relations—to educate the public to what the Maine Medical Association is doing in each community for the betterment of the public in general. A more intimate relation between the Maine Medical Association and the Maine Public Health Service has been attempted and committee meetings with the organization have been held.

I wish at this time to thank the committee chairmen and county officers and all who have contributed to the progress of this year's program.

CHAIRMAN AMES: You have heard this unusually comprehensive report from the Chairman of the Council. Are there any questions you would like to ask? If not, I will declare the report approved and placed on file.

The next item of business is the presentation of the budget. Dr. Goodwin, as Chairman of the Council, will present that to you.

DR. GOODWIN: The Council has gone over this budget as compared with the last two years. I shall read the summary of the articles, and it will then be open for discussion on any point.

The expenses of the President constitute the first item on this budget program. Last year, the amount was \$300.00, but on account of the decreased valuation of the dollar and the cost of things in traveling around, and because of the amount of work he has to do, it was found necessary to increase this somewhat, so it has been recommended by the Council that \$350.00 be appropriated next year for the President's expenses.

The next item is the salary of the Secretary-Treasurer and Editor. The same condition applies to this position. Ten years ago the salary that he was receiving was about half of what is now recommended, and he could do pretty well on it, but he gives practically all of his time to this office, and there is an immense amount of detail in arranging all the meetings and the affairs in detail that take place during the year, including the Committee meetings and the Council meetings, and the Semi-Annual and Annual Meetings.

To this position was given \$3,000.00 last year. The Council feels that this sum should be raised to \$4,000.00 this year.

For the Assistant Secretary, there is recommended a salary of \$3,000.00. She is a full-time Secretary, and formerly received \$2,500.00.

The expenses of the Secretary-Treasurer last year amounted to \$428.00; the amount of \$300.00 is recommended for this year.

The office expense for the Association office this past year was \$1,259.22, and the Council has recommended about the same; \$1,200.00.

For the committee expenses, the Medical Advisory Committee has had \$1,000.00; that has been standard for several years, and we recommend the same.

The Committee on Graduate Education has been approved for a \$100.00 appropriation for this year.

For special committees that have been very active this past year and have had considerable expense, more than their appropriations, the Council recommends a fee for all of these committees of \$500.00 for traveling expenses and expenses entailed in mailing and general work of that type.

For the State Delegates and Council, there is an appropriation recommended of \$500.00 for this year.

For the Delegate to the American Medical Association, who now has two meetings instead of one, we propose an appropriation of \$400.00.

For the Clinical Session, we have recommended an appropriation of \$300.00.

For the New England State Medical Council dues which are \$100.00, we recommend that amount.

The total budget recommended for the Association office this coming year, for your approval or otherwise, amounts to \$11,750.00 as against \$9,741.12 for last year.

The total budget for the office of the Executive Secretary last year was \$12,000.00, and the Committee recommends the same amount this year, as there will be practically the same expense.

The detailed list of expenses for these two separate budgets can be seen by anyone here; there are several copies of it that are available, I believe.

I think that covers the recommendations of the Council.

The total is \$23,750.00 for the entire year, including the Executive Secretary's Budget, and the regular, official budget of the Association.

CHAIRMAN AMES: You have heard Dr. Goodwin, Chairman of the Council, presenting the budget. Do any of the delegates wish to ask any questions? If not, a motion is in order to accept the budget as recommended by the Council.

DR. FRANCIS A. WINCHENBACH of Bath: I move that the budget as recommended by the Council and just read to us, be accepted.

This motion was duly seconded by Dr. Carl E. Richards of Alfred and was carried.

PRESIDENT COBB: Mr. Chairman and Gentlemen. We are getting into big business, because we are paying a lot of dues and everything else, and although the by-laws say it shall be the duty of the council to recommend, and so forth, I think, for the benefit of this House of Delegates that has to vote on this budget, that hereafter, when the budget comes up, we ought to have copies given to all the delegates, so that they can see what they are voting on. I make that as a motion, Mr. Chairman.

QUESTION: Might that not be sent out earlier?

CHAIRMAN AMES: Yes, and, as a matter of fact, I think it would be very desirable. To take care of that could easily be part of the instructions to our office.

DR. DELBERT M. STEWART of South Paris: I don't wish to criticize in any way, but, as a delegate, I should like to be able to take home the information of whether or not we have money enough to pay these bills, whether or not our present dues will be sufficient, and something about our financial standing. I haven't that information at the present time.

CHAIRMAN AMES: That is a very good question.

The motion of President Cobb was duly seconded and was carried.

CHAIRMAN AMES: I think it would be in order for Dr. Carter to give us the figures Dr. Stewart asked for, now.

The question Dr. Stewart has in mind is, what is the relationship between our present expenses and what we take in each year?

DR. CARTER: We received from dues last year the sum of \$25,655.00; income from investments, \$490.00; from our out of State advertising we received \$6,908.23; from local advertising, \$810.28; subscriptions and sales of the JOURNAL, \$28.00; Exhibit spaces, rentals, etc., at the convention, \$1,254.00; making a total of \$35,146.69.

Our expenses last year totaled \$30,023.58, leaving a revenue in excess of expenses of \$5,123.11.

DR. ERVIN A. CENTER of Steep Falls: I think the delegates another year should receive a financial statement of the Association for consideration, in addition to the contemplated budget.

SECRETARY CARTER: Our books are audited as of May 31st, and we just got this report back.

DR. CENTER: It seems to me that these are two things

that are important for consideration in making up the budget for another year, and the financial condition of the Association goes hand-in-hand with the budget.

CHAIRMAN AMES: I am sure that this will be taken care of so that all the details will be in writing for your consideration.

That takes care of the routine reports of the Chairman of the Council. It is customary, as you know, to publish as many Committee reports as possible in the June issue of the JOURNAL. But, it seems best to bring some of these before the House of Delegates. Therefore, at this time, I am going to call for two standing committee reports which haven't yet been printed. The first of these is the Committee on Medical Education and Hospitals, and, in the absence of the Chairman, Dr. David E. Dolloff of Biddeford, Dr. Carter has the report to read.

SECRETARY CARTER: "Nothing has been referred to this Committee; therefore, I have no report to make at this time. (Signed) David Dolloff."

CHAIRMAN AMES: If there are no questions or comments, I declare the report approved and placed on file.

The second is the report of the Committee on Social Hygiene. The Chairman of that Committee is Dr. Oscar R. Johnson of Portland.

SECRETARY CARTER: Dr. Johnson has been very ill for several months, and has not been able to do any work. He is improving and getting better but we have not referred anything to him at this time.

CHAIRMAN AMES: These remarks will substitute for Dr. Johnson's report for the moment and will go on our records.

This might be interesting to the delegates at this time. You will remember at our meeting last year, Dr. Johnson brought up again the question of the matter of reporting venereal disease, and at that time, a more definite move was made. The House of Delegates voted that the Council confer with Dr. Johnson and in cooperation with him work out some method of approach whereby, if possible, the law could be remedied or changed so that the situation would be clarified.

As you know, the Legislature hasn't met in the interim; but, this is on the agenda, and, subject to the health of Dr. Johnson, that conference will be held, and an attempt made to straighten out that situation.

That is in the nature of a report of the motion voted upon last year.

There are, at this time, a few special committees, whose reports have not yet been published or received. The first of these is the Committee on Industrial Health, and the Chairman of that Committee is Dr. Albert P. Royal of Rumford. Dr. Carter has that report.

SECRETARY CARTER: I have a letter from Dr. Royal in which he says: "The Committee on Industrial Health did not function this year. I made inquiries to see if anyone attended the Conference held in Cleveland last fall. No one went. (Signed) Albert P. Royal, Jr."

CHAIRMAN AMES: These late reports are remarkable for their brevity. That report will also be placed on file.

The Committee on Rural Health is a new Committee

which was appointed by the President, and the Chairman of that Committee is Norman H. Nickerson of Greenville. He is not here today, but we have placed his report on tomorrow's agenda. We shall be interested in this particular committee, I am sure.

Another new committee formed this year, by vote of the Council, and appointed by the President, at the insistence of the government, due to the troublous times, is the Committee on Civilian Medical Defense. It was set up by us as an emergency proposition, and it was suggested to us that the thing should be done very quickly. Such a committee was appointed, and the President appointed Dr. Charles W. Steele of Lewiston, as Chairman. Dr. Steele, will you please give us your report at this time?

DR. STEELE: Mr. Chairman, and Members of the House of Delegates, and other members of the Association. Some of these things are confidential for the moment . . . So I trust you will all treat it as such. (This report on file in the Association office.)

CHAIRMAN AMES: I am sure that after listening to that talk by Dr. Steele, we realize the "why" of the formation of a Committee on Civilian Defense, and why it was put up to us as an emergency. I am sure that we shall meet these problems. We thank Dr. Steele and his Committee for their work.

Dr. Thomas A. Foster, Chairman of the Amy W. Pinkham Fund Committee, is not here today, but I believe he has sent in a report to be read by Dr. Ebbett.

Mr. President and Members of The House of Delegates:


The Chairman of the Amy W. Pinkham Fund Committee submits the following report:

Since the annual meeting in June, 1947 — two plans for using the Fund have been considered.

One—a proposal to spend some money from the Fund for a school teacher for school children under treatment for tuberculosis at the Hebron Tuberculosis Sanatorium.

Two—a proposal to send questionnaires to all school Superintendents in the State, asking them for information about school luncheons.

This report will first give you information about proposal number one. Upon the request of Dr. Lester Adams, Superintendent at Hebron Sanatorium, for money to pay salary of school teacher for the children in Sanatorium the Committee was polled by letter. The Committee voted against the proposal in the mail poll. Following this vote the Committee met at Central Maine Hospital during the Clinical Session in November. Dr. Adams request was put before the Committee again for discussion. Again, a majority of Committee voted against the proposal. The Chairman of the Committee then talked with Dr. Adams and agreed to try once more to have the Committee approve the expenditure. The Maine Public Health Association Board of Directors had approved the expenditure but needed approval of our Committee to authorize it. The Chairman succeeded in finding enough members of Committee in favor of the plan to negotiate a compromise with Dr. Adams and the Board of Directors of the Maine Public Health Association. The compromise was as follows: A majority of the Committee



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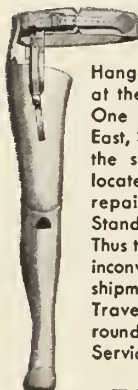
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agreed to approve the expenditure of the income for one year from the Fund for a teacher at Hebron. It was to be understood that the agreement held for one year only. Dr. Adams and Maine Public Health Association agreed and four hundred and forty-five dollars and eighty cents has been expended for a teacher. At the last meeting of the Board of Directors of the Maine Public Health Association, Dr. Adams gratefully acknowledged the receipt of the money and added that in his opinion the money for teacher was a valuable contribution to the treatment of the tuberculous patients and an expenditure in keeping with the intent of the testatrix, Amy Pinkham.

Now a report on proposal number two—The Committee believed that unpasteurized milk in school luncheons and in daily consumption among children in rural areas could be a means for spreading tuberculosis among the children of our State. Therefore, it was suggested that the Committee recommend and support a legislative enactment to have all milk for sale in the State pasteurized. Toward this end, the Committee proposed two steps. First—that a questionnaire be forwarded to all School Superintendents with following questions:

1. Do you serve milk with the school lunch?
2. If you do serve milk—is it pasteurized?
3. If raw milk is used—please give reason for its use.
4. If pasteurized milk is available, does it cost more than raw milk and how much?

The Maine Public Health Association agreed to send out the questionnaires and a statistical report of the survey is appended to this report as well as a descriptive chart.

It may be said in report that 113 questionnaires were sent to Superintendents of School Unions; the towns included numbered 482. So much for the first step.

The second step proposed toward the enactment of a law was, the dissemination of information about dangers of raw milk and the advantages of pasteurized milk. It was proposed to use the report of survey in program of education. And it was proposed to have Maine Public Health Council through its part time executive forward information throughout State by selected press release and news items.

Step one has been taken through the coöperation of Maine Public Health Association.

It remains for the Committee to proceed with step two.

The Chairman would like to add that correspondence and conversations with milk authorities in Maine and elsewhere convinces him that the path toward a State-wide law to pasteurize milk is an uphill one. It is a zig-zag path and has many large obstructions in it. It will need to be examined carefully, patiently and it may cost a lot of money to reach the end.

The Chairman wishes to thank the members of the Committee for their patience with the questions and for their sincere interest in the best method for using the Fund.

The interest on the fund amounts to \$2,039.51. The fund remains intact at \$20,000.00.

(Signed) THOMAS A. FOSTER,
Chairman.

CHAIRMAN AMES: Thank you, Dr. Ebbett. The report will stand approved and be placed on file.

(To be continued in the October issue)



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ALLERGIC REACTION TO PENICILLIN

From the Medical Service, Central Maine General Hospital

M. A. CHAPIN, M. D.

One notable feature of the widespread use of penicillin during recent years has been its relative lack of toxicity. A recent review of its use in a large number of patients states: "... serious reactions are rare, and no deaths clearly attributable to the drug have been reported."¹

Whereas the incidence of toxicity to penicillin is apparently low, the occurrence of severe allergic reactions from its repeated administration is being noted with increasing frequency in the recent literature. A recent case in this hospital focused attention on this subject and prompted this brief review for the reason that, in spite of recent reports, the potential dangers of penicillin sensitivity are not sufficiently realized by the general medical profession. Holden² and Shaffer,³ in their résumés of allergic reactions to penicillin, concur in stressing the severity of such reactions in sensitized patients. They feel there is and will be an increasing incidence of such reactions in the face of continued widespread use of this drug. They urge, in particular, a wider recognition of the dangers of its local application.

The fact that local applications of penicillin may cause greater sensitivity than results from its parenteral administration has been demonstrated. According to Pillsbury,⁴ the incidence of sensitivity reactions at present is over 15 percent. In the opinion of Barksdale,⁵ the tendency of locally administered penicillin to so sensitize a person that he cannot later take it in any form, should suffice to contraindicate

its use in this way. For similar reasons, penicillin should not be prescribed for minor ailments.

Delayed or acquired sensitivity reactions may be severe or even fatal.³ Wile⁶ reported serious reactions, similar to that of the following case report, involving edema of the pharynx, larynx and lungs. In numerous other instances, there have been reported severe asthmatic reactions,⁷ serum sickness,⁸ bullous⁹ and exfoliative³ dermatitis. Barksdale⁵ reports one death from exfoliative dermatitis resulting from penicillin. These are severe complications, — not to be risked by use of penicillin for minor lesions.

CASE REPORT

A 41-year-old male factory worker was admitted to the Central Maine General Hospital, May 1, 1948, because of migratory arthritis of one month's duration. There was no past or family history of allergy. He had always been quite well except for numerous colds in winter months. In 1945, following treatment of a severe upper respiratory infection with "sulfadrag," he developed hematuria and passed gravel in his urine. He had had several colds during the recent winter, with pneumonia in February, 1948, treated successfully and uneventfully with penicillin.

At the onset of his present illness with sore throat, six weeks prior to this admission, he had been given one intramuscular injection of 300,000 units of penicillin in oil and wax. This was followed the next day by mild urticaria lasting for about one day. The

sore throat quickly subsided. Two weeks later, he developed pain, swelling, tenderness and limitation of motion of both ankles. This gradually subsided within a week following which both knees became similarly though less markedly involved. Subsequently there were migratory symptoms in hips, wrists and fingers.

Physical examination was generally negative with exception of findings of rather dirty carious teeth and swelling, redness and tenderness of ankles, wrists and fingers, with moderate limitation of motion of these involved joints.

The red cell count was 4,900,000; the hemoglobin was 108% (16.4 gms.). The white cell count was 13,500; the differential count showed 66 polymorphonuclears, 3 stab forms, 24 lymphocytes, 9 monocytes and 3 eosinophils. The Westergren sedimentation rate was 33 mm. in one hour. Urinalysis was normal. The Widal group of agglutinations, including that for *B. abortus*, was negative. A roentgenogram of the chest revealed no evidence of active pulmonary disease. Roentgenograms of the teeth revealed marginal pockets about the lower incisors consistent with infection.

He was comfortable and afebrile with treatment consisting of sodium salicylate, 1 gram four times a day combined with mild physiotherapy to the involved joints. On May 8, extraction of the four lower incisor teeth was accomplished under sodium pentothal anesthesia without difficulty. Crystalline penicillin, 30,000 units intramuscularly every three hours, was administered, once before the extraction, and twice afterwards, being discontinued following the third injection when he first complained of beginning pruritis. Pyribenzamine, 50 mg. by mouth, every three hours, was started. Within 24 hours he developed fever; all of the involved joints became much more swollen, tender and painful; there was marked edema of the eyes, face and lips and giant urticaria of most of the remainder of the body surface. During the night of the second day after onset of this reaction he developed sudden dyspnea, cyanosis, inability to breathe and a feeling of impending death. Physical findings were not remarkable except for labored breathing, cyanosis and swelling of the uvula. He responded within a few minutes after administration of 0.3 cc. subcutaneous epinephrine (1:1000) and oxygen by intranasal catheter. Five similar attacks developed during the succeeding four days, each severe and of 10-15 minutes' duration. His urticaria slowly subsided over a period of seven days and subsequently the joint symptoms and signs gradually cleared. At the time of his discharge all joints appeared normal with exception of slight swelling.

This patient was advised as to the dangers of receiving either penicillin or sulfonamide again in the

future. His pertinent question concerning possible therapy should he again develop pneumonia or other infection was answered only in the negative with regard to these two drugs.

DISCUSSION

This case demonstrates one type of severe allergic reaction which may occur as a result of penicillin sensitivity. This patient had previously received penicillin in treatment of a pneumonia, he had developed mild urticaria when it was later administered in treatment of a sore throat, and when it was still later given prophylactically during the extraction of infected teeth he developed severe urticaria, exacerbation of joint symptoms, fever and episodes of apparent edema of larynx and lungs. The latter were severe and could have resulted in death if treatment had not been quickly available.

Complications of this nature, as Wile⁶ has indicated, are dangerous to life. The patient of Barksdale⁵ died as a result of an exfoliative dermatitis due to penicillin.

It is therefore apparent that this drug, with respect to development of sensitivity precluding its use in a later serious infection, should not be used in treatment of minor ailments for which other remedies are available. Its use locally to skin or mucous membranes, in view of its demonstrably greater sensitizing propensity by this route, seems contraindicated.

CONCLUSIONS

1. A case of severe allergic reaction to penicillin is reported.
2. A brief review of allergic reactions to penicillin is included.
3. Discontinuance of the use of penicillin for minor ailments or in the form of local applications is advised.

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KEROSENE POISONING

From the Pediatric Service, Central Maine General Hospital

HENRY C. THACHER, M. D., GLIDDEN L. BROOKS, M. D.

INTRODUCTION

Because of the prevalence of the use of kerosene as a fuel for cooking and heating purposes in Maine, poisoning resulting from the accidental ingestion of this material is not uncommon. The purpose of the article is to report four cases admitted to the Central Maine General Hospital in the past year (1947-1948) and to call the attention of the profession to this hazard.

INCIDENCE

The chief hazard of kerosene in adults results from skin irritation sustained from contact with this hydrocarbon complex. In children at the toddling age, 10 months to 3 years, accidents are the result of unwitting consumption of the kerosene which has been carelessly stored in cups and glasses commonly used for food or has otherwise become available to the exploring child. The toxicity of kerosene has been the subject of some experimental work reported in the literature. Since kerosene is a crude material derived from petroleum, the product varies according to the method of refining and the stage to which refining is carried. Deichman and co-workers have observed that traces of impurities in varying amounts are found in kerosene: namely sulphur, nitrogen compounds, caustic alkali and organic solvents. These workers compared the toxicity of various brands of kerosene given in oral doses to rabbits and found wide differences.¹ A second variable is of course the amount ingested. As a rule, this is not large since the unpleasant flavor and intense irritant action cause choking and preclude swallowing.

SYMPTOMS AND RECOGNITION

Numerous articles in medical literature have described the clinical features which follow accidental ingestion of kerosene. The immediate effects which result from burning the mucous membrane of the mouth and pharynx are coughing and choking, with spasm of the glottis and vomiting. The delayed effects following absorption may be cerebral depression, drowsiness, collapse, and coma. Fever and elevation of the pulse rate ensue. Pulmonary complications are common. The diagnosis is at once obvious if, with the characteristic symptoms, the odor of kerosene can be detected on the child's breath.

PATHOGENESIS

The pathological changes observed in cases of kerosene poisoning have revealed the irritant action of the material on the mucous membranes of the mouth, pharynx and on the gastro-intestinal tract, and the depressant effect on the central nervous system, liver, kidney and heart muscle. Unless the exposure of tissue to the irritant is prolonged the changes produced are reversible, and do not lead to scar formation.

Most attention has been paid to the pathological changes in the lungs. These present a violent reaction to the hydrocarbon complex. Vascular damage here results in various degrees of edema and perivascular transudates. Emphysema is common. An exudative and productive reaction with frank consolidation of the lung mass is not common, however.

Lesser, Weens and McKay in a clinical study of 35 patients with kerosene poisoning reported an incidence of pulmonary manifestation in 77% of the patients examined roentgenologically. These showed various degrees of fine to moderately coarse densities, peri-bronchial reaction, and consolidation at the cardiophrenic angles.²

Other pulmonary complications have been described. Lavenstein reported a 2-year-old child who, subsequent to ingestion of kerosene, developed rapid respirations. He improved in 24 hours, and on the third day, following sudden dyspnea, was found to have a pneumothorax, subcutaneous emphysema and pneumopericardium.³ Scott reported a similar complication but without the pericardial involvement.⁴

EXPERIMENTAL WORK

Experimental work has been largely confined to efforts to determine how kerosene reaches the lungs. Lesser and his group introduced 20-40 cc. of kerosene by stomach tube into rabbits and found no subsequent lung involvement. In rabbits given injections of 0.75-2.0 cc. of kerosene by hypodermic needle intratracheally, lung changes were present in all. They concluded that the pulmonary changes resulted from aspiration into the lungs and not as the result of absorption from the gastro-intestinal tract with subsequent excretion into the lungs.

Deichmann, Kitzmiller, Witherup and Johannmann, using a greater number and variety of animals, gave approximately the same amounts of kero-

sene by the oral, intravenous and intraperitoneal routes and presented evidence to show that kerosene intoxication results in lung involvement, whatever the manner of its administration.

CASE REPORTS

During a 2-year period four children have been admitted to the Central Maine General Hospital because of ingestion of kerosene.

(1) L.T.—15 mos. female admitted 8/22/46:

One and one-half hours before admission found with pint bottle containing kerosene. Twenty minutes later became drowsy. Physical examination negative except for odor of kerosene. Developed no pulmonary signs.

(2) D. G. (Patient of Dr. L. C. Gross) 2½ yrs. male admitted 7/29/47:

Swallowed an unknown quantity of kerosene two days before admission. Vomited immediately and seemed well until early next A. M. when he developed labored respirations and drowsiness.

Physical examination showed drowsiness and labored respirations. Breath sounds harsh; no rales. Temperature 100.6°. White blood count 23,100, neutrophils 64%.

X-ray on 8/29 showed slight decreased radiance in the mid-portion of the left lung.

Placed on sulfadiazine therapy. Temperature fluctuated between normal and 101° for six days, then became normal. Respirations improved gradually.

X-ray on 8/5 and 8/11 showed persistence of density at left base and a slight degree of pneumothorax on left. By 8/15 chest was essentially clear and white blood count had fallen to 5,300 with 39% neutrophils.

(3) P. T., 2 yr. female admitted 6/30/48:

One-half hour before admission swallowed "½ glassful" of kerosene. Began to cough at once. Vomited material smelling strongly of kerosene.

Physical examination negative except for slight irritation of pharynx. Temperature 100.6°. White blood count 16,000 with 81% neutrophils.

X-ray on admission showed increased density of left hilar markings. Penicillin therapy begun. On evening of admission temperature rose to 104°. Became normal after five days.

X-ray on 7/2 showed increase in the process and on 7/8 showed clearing of the pneumonitis.

(4) D. F., 16 mos. female admitted 7/4/48:

Two hours before admission child swallowed about 3 ounces of kerosene. This was followed immediately by coughing, choking and cyanosis. Lost consciousness for one hour.

Physical examination. Pale and lethargic. Respirations quiet. Temperature 99°. White blood count 12,300, with 67% neutrophils.

X-ray showed increased hilar markings with some mottling in upper lung fields.

Penicillin therapy instituted. Four hours after admission temperature rose to 104° and respirations became labored. Recovery after six days of treatment.

DISCUSSION

These four cases represent a fair cross-section from the standpoint of severity, type and duration of symptoms of what may usually be encountered by the practitioner. All of these children are in the age group where exploration of the environment is characteristic, as is oral investigation of all substances casually encountered. Case one represents minimal exposure to kerosene. The absence of coughing suggests either lack of parental observation or failure actually to ingest the kerosene. The remaining children all showed X-ray and clinical evidence of pulmonary involvement, case 2 exhibiting pneumothorax.

It is worthy of note that signs of pneumonia may not appear for 12 hours or more after ingestion of kerosene. Therefore, all youngsters suspected of inhaling or swallowing kerosene should be closely observed and parents or attendants instructed to watch for respiratory distress. The early use of penicillin seems indicated in an attempt to abort serious lung involvement through secondary bacterial infection.

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Health is something that all men desire and there is no limited supply for which nations must compete. Public health work carries no threat to anybody,

anywhere. Cancer and scarlet fever have no political ideology. — Raymond B. Fosdick, *Am. J. Pub. Health*, Jan. 2., 1948.

URINARY RETENTION

From the Urological Service, Central Maine General Hospital

DONALD L. ANDERSON, M. D., Lewiston, Maine

Retention of urine is of major concern, not only because it predisposes to infection, but more important, if left untreated it will cause secondary renal insufficiency, irreparable and fatal. This is in addition to the underlying pathology.

Acute urinary retention is terrifying and painful. The patient is in agony, often insisting that something, anything, be done to relieve him. It is well to remember at that moment that micturition is a delicate reflex, easily upset. Relaxation and proper frame of mind are important. Many times it is difficult to obtain a history because of the mental state of the patient. History is necessary to ascertain the pathology which might be present, also to give the opportunity to take command of the situation, collect one's thoughts, and not rush to instrumentation. This is especially true with the patients of the younger age group when mental inhibitions or upsets may be the only cause.

Complete urinary retention in a child is rare,¹ and congenital valves of the urethra or damage to the spinal cord must be looked for. Do not overlook extreme phimosis or pinpoint urethral meatus that has become incrustrated. During early adulthood stricture, abscesses, calculi, and fibrous obstruction at the vesical outlet are more common etiological factors. Later in life prostatic hypertrophy and "new growths" play the most important role. However, stricture and calculi should not be forgotten. Rarely in this age group do we see the so-called psychic or neurotic group.

Post-operative retention may occur at any age. In the young it is usually of short duration. In older patients, and in those who have undergone extensive pelvic surgery, it is apt to be prolonged. In the latter it is well to insert an indwelling Foley catheter on completion of the operation, using a small size (#16-18F.) so urethral secretions can drain around it. In many of the cases coming to pelvic surgery it would be well to perform cystoscopy and have pyelographic studies to accurately determine how the pathology has affected the genito-urinary tract, or if there is intrinsic pathology in the genito-urinary tract. These simple precautions can eliminate many cases of serious post-operative retention. In simple cases, having the bedpan or urinal warm, pouring warm water over the perineum or penis, and allowing the patient to assume his or her usual posture for voiding may solve the problem.

In the female, retention is relatively uncommon since the urethra is short, patulous and straight. It

is usually due to infection superimposed upon trauma such as childbirth. The distal third of the urethra is the most frequent site of obstruction. Malignant tumors of the cervix and the bladder neck should be sought carefully. Calculi rarely occlude the female urethra.

In the male with urinary retention the prostate gland is the chief offender. The prostatic patient complains of nocturia from nocturnal polyuria, urinary frequency, and dysuria such as difficulty in starting the stream, smallness of calibre or dribbling. Nocturia is one of the initial symptoms, and is one of the first signs of failing renal function. Approximately 50% of males with chronic retention have acute urinary retention as their first symptom.² This comes on after exposure to cold, overexertion, alcoholic indulgence, or voluntary retention. There may be burning or pain, depending upon the amount of infection present. Hematuria may be the presenting complaint, but on careful questioning other symptoms of longer duration will be admitted by the patient.

A recent study by Kretschmer³ indicates that the prostatic patient presents himself on an average of nearly eighteen months earlier than ten years ago. Similarly only 33% will have hydro-nephrosis, 11.6% diverticula, and 3.1% stones, compared with 44%, 16% and 7.5% respectively. These coexisting troubles are in direct relation to the time elapsing between the onset of symptoms and the institution of relief measures. Education of the public is greatly responsible for this improvement.

Whatever the etiology of retention may be, benign or malignant, the secondary pathological changes resulting are of prime importance.⁴ The bladder musculature first undergoes hypertrophy as evidenced by trabeculation. The bladder then starts to dilate as decompensation develops, with the wall pouching outward between the thickened muscle bands. Infection of the retained urine is always present. The resulting edema causes further obstruction, so a vicious cycle is started. Gradually the uretero-vesical valves become incompetent with subsequent dilatation, elongation and tortuosity of the ureters. This dilatation due to backpressure of the retained urine extends to the renal pelvis and calyces and collecting tubules. The glomeruli resist the hydronephrotic atrophy the longest. As these pathological changes are taking place, the renal insufficiency is developing. This is evidenced by increased nitrogenous wastes in the blood and poor urinary concentration (includ-

ing test dyes such as phenolphthalein and indigo-carmin). Often the blood pressure is elevated along with the increased urinary backpressure. The patient who has the latter finding has a very narrow margin of safety. Often rapid decompression with its resulting edema and congestion will be fatal. Drop-by-drop decompression with frequent blood pressure readings and N.P.N. determinations is in order. Slow renal impairment can go to extremes silently, with the patient in apparent good health. In these cases beware, the least disturbance of the pathological renal pressure that has been built up wrecks the kidney function, and may be fatal in a week's time.

The prognosis of acute primary retention depends entirely on its cause, the condition of the patient, and last but not least, the care and judgement used in its relief. In the presence of advanced cardiac or renal disease, relief measures, no matter how simple, must never be considered minor procedures.

With the multiplicity of causes, no set rule can be followed for immediate treatment. Always give simple methods adequate trial before resorting to instrumentation.⁵ Often times a hot Sitz bath, an analgesic such as Demerol or morphine or Pantapone, and reassurance will do the trick. Any instrumentation must be done under the strictest asepsis, as the urethra always contains bacteria. This latter fact is of utmost importance in patients who may have had residual urine prior to acute retention, or those who have spinal cord lesions. The bladder should be decompressed very slowly, drop by drop is best of all, especially in older patients. To gain entrance into the bladder, use a soft rubber catheter, #14-16F., with or without a Coudé tip. This is least likely to produce trauma. Gentleness is the keynote. If unable to pass a soft rubber catheter, try a urethral catheter or filiform. This is best left in place for twenty-four hours with the urine passing around it. Often the urethra is thus dilated sufficiently to pass the regular soft rubber catheter. If any difficulty is encountered then in passing the catheter, it should be left in place until the mode of further treatment has been decided. Rigid instruments should never be used because of the trauma they produce, and the increased danger of perforation and subsequent urinary extravasation. If no type of instrument can be passed per urethra, even with the aid of anes-

thesia, cystotomy must be resorted to. In order to control existing infection or to prevent infection, it is well to give some urinary antiseptic. New triple sulfonamide combinations have less tendency to form concretions than any single sulfonamide compound, but in addition the urine should be kept alkaline and fluid intake maintained at a minimum of 2500-3000 cc. The output should be carefully checked, with 1200 cc. as a minimum. Usually one-half gram⁶ of the triple drug given three or four times daily will insure urinary concentrations that are bacteriostatic. Mandelic acid compounds are well worth remembering, especially for patients sensitive to sulfonamides or taking fluids poorly.

Further adequate and proper treatment can be started only after proper diagnosis has been made. Often this entails hospital admission for diagnostic procedures. Careful history and physical examination should be carried out, with special attention focussed on the cardio-vascular system. Digital examination of the rectum and/or vagina must never be omitted. Complete blood count with smear and serology, non-protein nitrogen determination or blood urea are minimal additions to the necessary urinalysis, residual urine and urine culture. Other laboratory procedures should be included if findings in history or physical warrant them. Usually kidney function tests are desirable. The simple dilution-concentration test gives a good picture renal function. Urea clearance test is also reliable.

The need for special examinations such as cystoscopy, pyelography of intravenous or retrograde variety, and of course, any surgery, are decided upon only after careful evaluation of the individual patient.

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The unsolved problems of public health and preventive medicine lie in the field of health protection and health promotion of the adult, particularly the young adult, who is the most productive member of society. It is also quite clear that problems of adult

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PRE-ANESTHETIC MEDICATION

From the Department of Anesthesia, Central Maine General Hospital

V. J. MOORE, M. D., G. CLAPPERTON, M. D.

The non-volatile drugs administered before an anesthetic agent are just as much a part of the anesthesia which follows as the gases, vapors, or other agents used. Pre-anesthetic medication should not only interest the anesthetist, but every physician whose patient is to receive an anesthetic. This is especially true in cases where the anesthetics are administered by technicians and the premedication prescribed by the surgeon. The proper choice of drugs for premedication is most essential if one wishes the anesthesia to be safe and comfortable for the patient and an aid for the surgeon. Routine premedication with fixed dosages and given "on call to the operating room" carries many pitfalls and is to be condemned. Each case should be individualized as to dosage. The pharmacological action of pre-anesthetic drugs should be clearly understood, especially insofar as their relationship to the anesthetic agent which follows.

The purpose of employing pre-anesthetic drugs is:

- (1) To decrease the patient's reflex irritability, accomplished by lessening apprehension, quieting the patient, which in turn minimizes or obliterates the excitement stage. Furthermore, the amount of the anesthetic agent needed is reduced, thereby lessening its toxicity and increasing its margin of safety. These factors make for a safer and more agreeable anesthesia for the patient.

- (2) To minimize or abolish secretions of saliva or mucus which may cause respiratory obstruction during anesthesia and respiratory complications after operation.

- (3) To minimize or prevent certain untoward effects that may accompany the use of local anesthetic drugs.

All patients possess a certain degree of resistance to anesthesia which is comparable to their reflex irritability. The differences in resistance are due to the differences in the metabolic rate of the patient. The starting point of any anesthesia varies with the metabolic rate and the latter varies with many factors and conditions present at the time of operation. The resistance to anesthesia or reflex irritability and metabolic rate of a patient parallel each other. As has been pointed out by Guedel,¹ the normal metabolic rate at birth is 35 calories, rising sharply to 40 calories at the end of the first year. From the first to the sixth year, there is a less rapid rise to about 48 calories followed by a slight fall to 42 calories

from the sixth to eleventh years. At puberty, the metabolic rate averages 46 calories and from this point on there is a slow decline until the age of eighty when the rate is 35 calories, as at birth. Since resistance to anesthesia parallels the metabolic rates as shown above, it follows that the greatest amount of premedication would be required for the adolescent and the least for the very young and the very old.

We have stated above that the metabolic rate varies with many factors present at the time of operation. Some of the most important factors exercising their influence upon metabolic rate are:

- (1) Pain, the presence of which increases the irritability of the nervous system and raises the metabolic rate in proportion.

- (2) Fever which when present increases the metabolic rate about 7.5% per each degree.

- (3) Endocrine dysfunction, notably of the thyroid gland, which has a marked effect upon oxygen requirement and nervous irritability.

- (4) Emotional disturbances, especially that of fear and apprehension, is the most constant factor found which produces an increase in pre-operative metabolic rate.

These four factors may effect a metabolic increase alone or collectively, or increase the effect of one another.

The non-volatile drugs most commonly used in pre-anesthetic medication are morphine, atropine, scopolamine and the short-acting barbiturates such as nembutal and seconal.

Morphine is probably the most frequently used drug and most important. It reduces reflex irritability, relieves pain and allays anxiety of the patient, thus lessening the excitement and delirium of induction of anesthesia and reduces the amount of anesthetic agent needed to maintain surgical anesthesia. Its depressing action upon the respiratory center is known to all and should be constantly kept in mind. Morphine administered subcutaneously will begin to exert its effect on pain in about 20 minutes whereas it requires at least 60 minutes to achieve its maximal effect on metabolism. It is most important that 60 to 90 minutes elapse after the subcutaneous administration of morphine before the induction of anesthesia to be certain that the peak of respiratory depression has already passed and will not coincide with that which may occur in deep anesthesia. The depression

Continued on page 284

CARCINOMA OF THYROID GLAND

From the Surgical Service, Central Maine General Hospital

WALDO A. CLAPP, M. D.

The following paper is a presentation of 46 personal consecutive cases of thyroidectomy performed at the C. M. G. Hospital during the years 1942, 1943, 1946 and 1947. It is not the purpose of this presentation to discredit the use of propyl thiouracil in the treatment of primary hyperplasia with hyperthyroidism, but rather to draw to the attention of those who are treating hyperthyroidism the fact that carcinoma of the thyroid is not a rare clinical entity. The reason for presenting two cases of thyroiditis is to show its similarity microscopically and to stress the difficulty in differentiating this disease from a malignant gland clinically.

It must be remembered that such a small series is of no statistical importance but this review may be a stimulus for others to analyze their clinical material from other Maine hospitals and if this number of cases were multiplied 10 times the total would then be statistically relevant.

It is noted from a review of the recent literature that there are conflicting opinions regarding the incidence of cancer of the thyroid gland. It is agreed by all that the occurrence of neoplasm in primary hyperplasia (Graves' disease) is extremely rare and a discussion of it per se is unnecessary. However, the carcinogenic effect of the newer drugs has not been established. In rats, Bielschowsky⁴ was able to produce adenomas and malignant neoplasms by simultaneously administering 2 acetyl-aminofluorine and allyl-thiouracil. This work has not been reproduced and even though the drug produces epithelial hyperplasia, there is no conclusive evidence that it is carcinogenic.

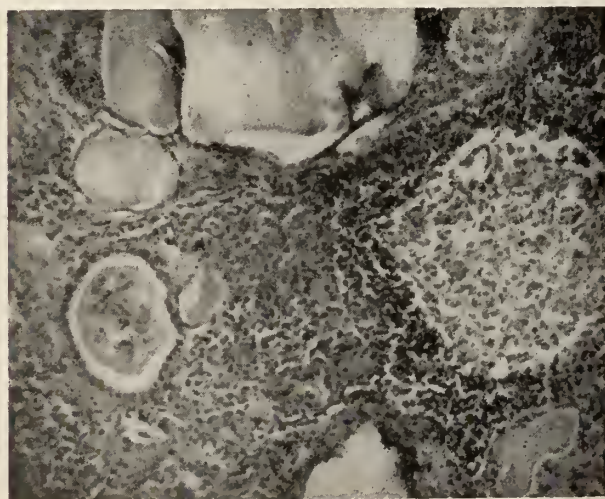
There have been two divergent opinions expressed in the literature. On the one hand, Van der Laan, Rogers et al. have shown a very low incidence of carcinoma in routine autopsy material and state that from 1:2000 to 1.99% show malignancy. On the other hand, Lahey,¹ Hinton and Lord,⁵ Cole et al.⁵ and Anglem and Bradford⁵ show an incidence of from 4.8 to 11% in toxic adenomatous goiters and as high as 24% in single non-toxic adenomas. The explanation of this discrepancy as cited by Anglem and Bradford⁵ is that the incidence of carcinoma will be higher in surgically removed specimens than in routine autopsy material because the reason for surgery in many incidences was a suspicion of neoplasm. Realizing this fact it was felt that a summary of one's personal experience in an extremely small series might be of interest even though no definite conclusions can be drawn.

The following table shows an analysis of 46 consecutive thyroidectomies:

<i>Classification</i>	<i>No. of Cases</i>
Primary Hyperthyroidism (Graves' Disease (co-existing strumitis—4)	10
Multiple Colloid Adenomatous Goiter (co-existing strumitis—2)	25
Colloid Adenoma	5
Chronic Thyroiditis	2
Carcinoma	4
	—
	46

It will be noted that there were two cases of thyroiditis, representing the two types of struma: struma lymphomatosa and Riedel's struma. Because of the similarity clinically, the hard, "woody" enlargement of the gland, the presence of pressure symptoms, hoarseness, and the fixation to adjacent structures at the operating table,² these two cases are presented.

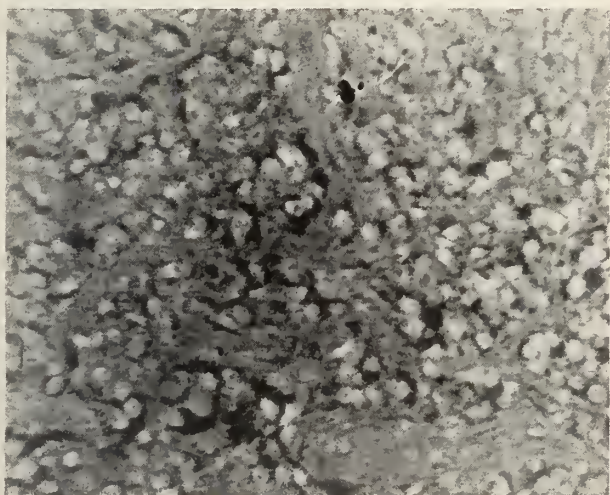
Case #1. S. R., a 15-year-old girl admitted 7/19/46, whose complaint was pain, tightness and enlargement of gland of 2 years' duration, loss in weight 8 lbs., B.M.R. +7. Treatment: Sub-total thyroidectomy. Post-operatively: Thyroid extract gr. 1½ daily.



STRUMA LYMPHOMATOSA

Note replacement of thyroid architecture by lymphocytes and lymph follicle.

Case #2. C. S., 45-year-old female admitted 7/6/48, whose complaints were hoarseness, loss in weight, nervousness, tachycardia, and "cancer phobia" of 4 months' duration. B.M.R. +2, cholesterol 244 mgs.%. Treatment: Sub-total thyroidectomy. Post-operatively: Requires no thyroid extract.

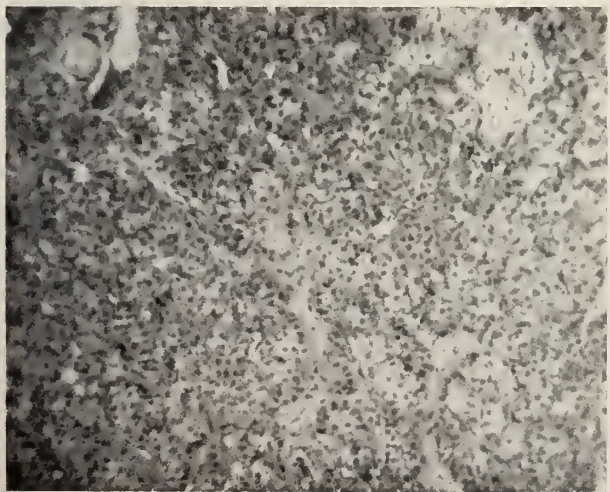


RIEDEL'S STRUMA

Note connective tissue replacement of ascini.

In making a diagnosis of carcinoma of the thyroid it is accepted that an adenoma with blood vessel extension be considered malignant.³ The first of these represents such a situation. However all microscopic sections have been confirmed by Doctors Gottlieb and McMahon.

Case #3. J. B., 39-year-old male admitted 12/10/42 because of hoarseness, pain in right side

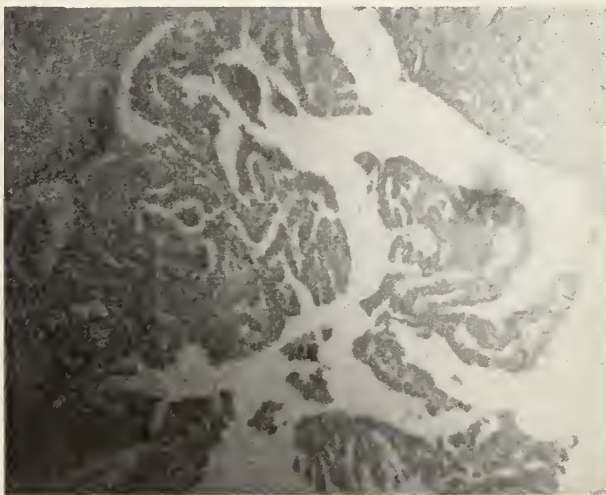


MALIGNANT ADENOMA

Note lack of anaplasia. This represents malignant changes within a fetal adenoma.

of neck, and thyroid enlargement of 6 months' duration. B.M.R. —5, cholesterol 132.8 mgs.%. Treatment: Sub-total thyroidectomy followed by post-operative radiation. Course: Well to date.

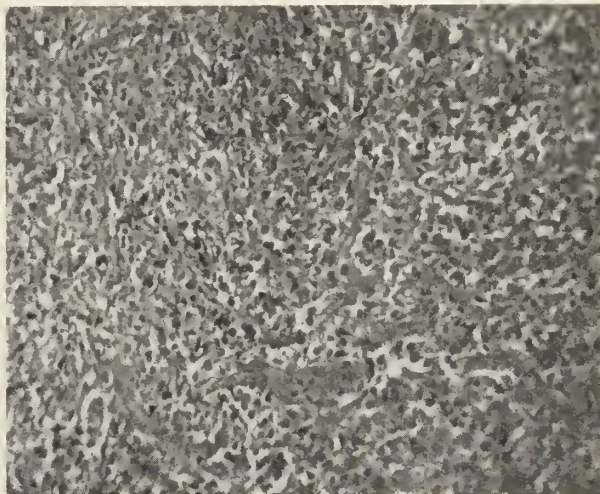
Case #4. B. F., 76-year-old male admitted 4/10/43 because of enlargement of gland, 6 years following trauma. Dysphagia and pain 3 months. Operation: Biopsy of deep cervical node. Treatment: Deep X-ray therapy. Course: Expired.



PAPILLARY ADENOCARCINOMA

The lymph node was completely replaced by papillary adenocarcinoma.

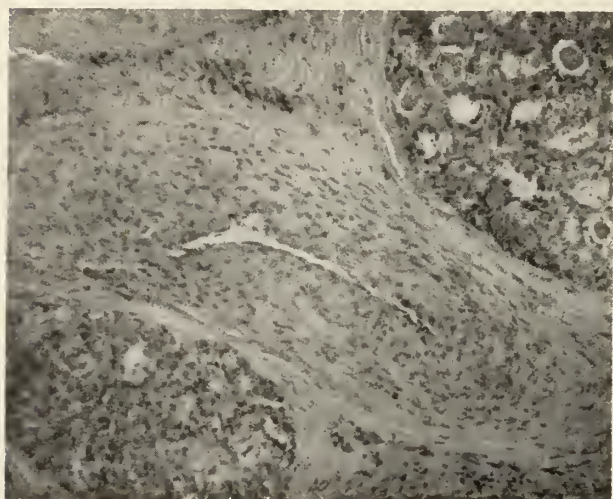
Case #5. E. M., 67-year-old female admitted 9/7/48 because of swelling in neck, 4 months' duration, B.M.R. +6, cholesterol 476.5 mgs.%. Treatment: Biopsy, division of isthmus, deep X-ray therapy. Course: Expired 4 months later.



SMALL CELL CARCINOMA

Rapidly growing small cell carcinoma. Note the anaplasia and frequent mitoses.

Case #6. P. M., 25-year-old female admitted 4/10/47 because of lump in her neck for 10 years, loss in weight 6 lbs. Solitary walnut-sized nodule right lower lobe. B.M.R. +16. Operation: Hemithyroidectomy. Course: No recurrence.



ADENOCARCINOMA

This case represents an early adenocarcinoma arising from within an adenoma.

Pre-Anesthetic Medication—Continued from page 281

from morphine may retard the induction of anesthesia and the tendency to push the agent often results in troublesome laryngospasm. Morphine given intravenously acts almost immediately upon pain and exerts its maximum depression in 10 to 20 minutes. The intravenous dose is usually one-half to three-quarters of the subcutaneous dose, although the full dose may be given if pain is present and severe. Morphine is usually combined with either atropine or scopolamine which may also be given intravenously. In the presence of circulatory depression of any degree, morphine should be given intravenously to prevent pooling due to the peripheral vascular constriction and then the sudden release of a full dose when peripheral dilatation occurs under anesthesia or improvement of circulation as a result of shock therapy.

Atropine is probably the most frequently used drug in combination with morphine. The chief purposes in the use of atropine are to prevent excessive secretions of the respiratory tract and salivary glands and to depress the activity of the parasympathetic nervous system.

Scopolamine rather than atropine combined with morphine is preferred by a great many anesthetists. The advantages of scopolamine over atropine appear to be: (1) the inhibitory action on secretions is more marked and more prolonged, (2) it contributes to psychic sedation and amnesia, and (3) combined with morphine in the ratio of 25:1 (e.g. morphine

grs. $\frac{1}{4}$, scopolamine grs. 1/100) antagonizes the depressent effect of the latter.²

The short-acting barbiturates such as nembutal and seconal are used chiefly for sedation and to counteract the untoward reactions sometime seen when employing procain and similar agents. These two drugs in hypnotic doses lend themselves ideally as premedication for children. They are tolerated well and it is possible for the child to fall asleep in bed, thus being spared the psychic trauma of being transported to the operating room and the distastefulness of open drop ether.

CONCLUSIONS

1. Importance of pre-anesthetic medication has been emphasized.
2. Routine dosage of pre-anesthetic drugs is to be condemned.
3. The objectives of pre-anesthetic medication have been discussed.
4. Factors influencing reflex irritability have been mentioned.
5. The action of the more common non-volatile drugs has been presented insofar as they affect the anesthesia.

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SUMMARY

1. A review of the recent literature is presented.
2. Two cases of thyroiditis and four cases of carcinoma occurring in 46 consecutive thyroidectomies are presented.
3. No definite conclusions can be drawn from such a small series but should stimulate more analyses of hospital statistics.

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ADENOMYOSIS

From the Laboratories of the Central Maine General Hospital and the Bingham Hospital Extension Services

DANIEL A. ROCK, M. D., RALPH M. TIMBERLAKE, JR., M. D., IRVING I. GOODOF, M. D.

Adenomyosis of the uterus is a condition characterized by a benign invasion of the endometrium into the myometrium with diffuse overgrowth of the latter. It has been called "endometriosis interna" to differentiate adenomyosis from "endometriosis externa" or pelvic endometriosis. Actually adenomyosis differs from endometriosis in that the myometrium is involved in the hyperplastic process. Endometriosis is seen in the uterus without myometrial involvement, primarily in those cases in which the involvement is on the surface of the uterus in association with a more general pelvic endometriosis.

The gross appearance of the uterus with adenomyosis is that of a somewhat enlarged organ, with diffuse thickening of the myometrium, usually asymmetrical. In the hypertrophic area, there are usually numerous minute translucent foci measuring 1-3 mm. in diameter, the center of which may or may not be marked by a hemorrhagic speck.

Microscopically, there are nests of endometrium within the hypertrophic myometrium deeper than the normal muco-muscular junction. The islands of endometrium show the usual glands and a variable amount of stroma. It has been shown that many of these islands are sinusoids that communicate freely with the uterine cavity.² The glands found in this process may be mature or inactive. In the former case, they will respond to endocrine stimuli just as do those of the mucosa itself. In the latter case, they may respond to the estrogenic hormone, but not to progesterone.

For the purposes of this paper, a discussion of the theories of origin of adenomyosis and endometriosis is omitted. The reader is referred to numerous papers on the subject, some of which are listed in the bibliography.²

This review covers 696 uteri examined in the laboratories of the Central Maine General Hospital in the 18 months from January 1, 1947, to June 30, 1948. The pathological findings have been studied with particular reference to the occurrence of adenomyosis.

Classification of 696 Uteri

Leiomyomata—200

- 1. With follicular or secretory hyperplasia of the endometrium or with no description of the endometrium 142
- 2. With atrophy of the endometrium 16

- 3. With endometrial polyps 28
- 4. With polypoid hyperplasia of the endometrium 14

Leiomyomata associated with adenomyosis of the uterus—116

- 1. With follicular or secretory hyperplasia of the endometrium or with no description of the endometrium 99
- 2. With atrophy of the endometrium 12
- 3. With endometrial polyps 3
- 4. With polypoid hyperplasia of the endometrium 2

Adenomyosis—135

- 1. With follicular or secretory hyperplasia of the endometrium or with no description of the endometrium 103
- 2. With atrophy of the endometrium 17
- 3. Associated with polypoid hyperplasia of the endometrium 1
- 4. Associated with chronic salpingitis, endometriosis of the ovary, etc. 5
- 5. Associated with endometrial polyps 7

Miscellaneous—245

- Polyps, endometrial 17
- Polypoid hyperplasia of the endometrium 10
- Atrophy of the endometrium 32
- Secretory or follicular hyperplasia of the endometrium 125
- Carcinoma of the fundus 20
- Carcinoma of the cervix 6
- Pregnancy 19
- Post partum uteri 5
- Acute and chronic salpingitis 8
- Tuberculosis 1
- Ectopic pregnancy 2

Examination of these findings and the accompanying chart reveals the following significant points:

1. Approximately one out of three uteri show adenomyosis. This incidence of 33% compares roughly with reports by Lewinski³ who found 53% and Fallis³ who found 49.6%. To a certain extent the incidence is dependent on the ability of the examiner to see the gross lesions. However, although a large number are recognized on gross examination, an equally large number are found microscopically without recognizable gross lesions.

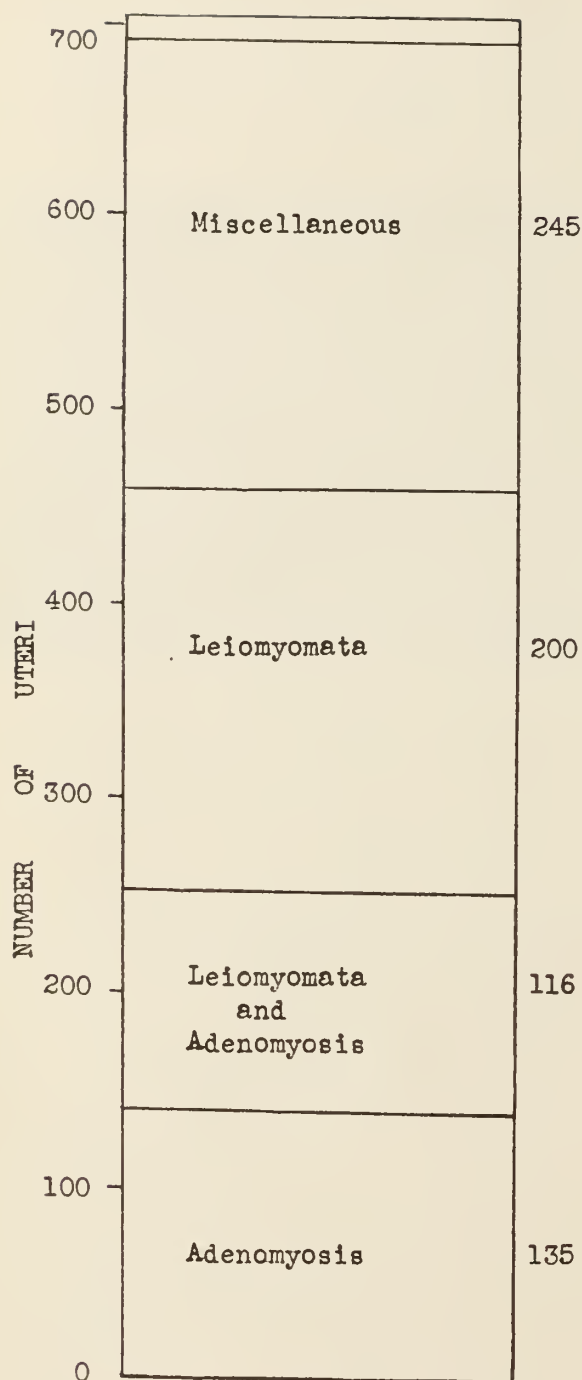


CHART I

The tubercle bacillus seems to select its tissue and confine its ravages there. Patients with lupus vulgaris rarely have active glandular, osseous and pulmonary tuberculosis in addition to cutaneous lesions. Patients with mixed tuberculosis are rare. The num-

2. In this series there are more leiomyomata unassociated with adenomyosis than with adenomyosis of the uterus but it should be noted that one-half of the cases of adenomyosis are associated with leiomyomata. This association of leiomyomata and adenomyosis is also stressed in the literature.³

3. There is a large number of cases in which adenomyosis is found unassociated with other pathologic change.

An attempt to correlate the clinical findings with the pathological occurrence of adenomyosis is in progress. In most specimens it is difficult to assess accurately the number of islands of adenomyosis, since a large number are found on microscopic examination only. In some uteri with large and numerous leiomyomata, the lesions of adenomyosis appear numerous grossly. In the remainder, the great majority, the number of islands of adenomyosis would appear comparatively small. This review appears to indicate that the finding of adenomyosis is so common that unless the symptoms so indicate and the pathologic report so designates, a diagnosis of adenomyosis is actually a description of an almost physiological condition.

SUMMARY

Specimens from 696 hysterectomies have been studied with particular attention to the incidence of adenomyosis. It was found in one-third of all cases. In view of this frequency, and the mild or early lesions found in the majority of cases, it is felt that adenomyosis is of relatively little clinical significance.

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ber of cases of pulmonary tuberculosis in which lesions of skin, bone or gland developed was comparatively small. — Henry E. Michelson, M. D., *J. A. M. A.*, April 17, 1948.

CLINICO-PATHOLOGIC CONFERENCE

Held at Central Maine General Hospital, August 12, 1948

This 65-year-old white unmarried woman, employee of a shoe factory, was admitted to the hospital May 31 because of rather severe hemorrhage from the rectum. Four days prior to admission she began to pass grossly bloody stools with clots and until admission she continued to have six to eight such bowel movements daily. She experienced no nausea, vomiting, or abdominal pain; her appetite remained good, and she noticed no weight loss. The patient had, however, experienced episodes of rectal bleeding of 3 to 4 days' duration at least once yearly for the past fifteen years. Frequent roentgenologic examinations of the large bowel had all been negative, the last examination having been made three months previously, at which time sigmoidoscopy and roentgenograms of the esophagus, stomach, and small intestines were also negative. A moderate anemia was first discovered at that time, and her blood pressure was recorded at 176/100.

For the past year the patient had a chronic cough, shortness of breath on exertion, nocturia twice nightly, and had been told that she had high blood pressure. There was no dyspnea, chest pain, hemoptysis, or edema.

The past medical history revealed that five years previously a supravaginal hysterectomy and bilateral salpingo-oophorectomy were performed because of vaginal bleeding. Leiomyomata of the uterus and atrophy of the endometrium, tubes and ovaries were reported. There was no history of any other operation.

Family History: Mother died of pernicious anemia, brother died of Bright's disease, and father died of "old age."

Physical examination on admission revealed an apprehensive, obese, elderly woman in acute distress with dyspnea, cyanosis of the lips, and marked pallor. Temperature 98°, Pulse 84, Respirations 22, Blood Pressure 132/88. Medium moist rales were heard on expiration over both bases and a grade I systolic murmur was heard over the entire precordium. The abdomen was obese and no organs or masses were palpated. There was no tenderness or rigidity. A healed, low abdominal, mid-line scar was present. Pelvic and rectal examinations revealed no gross abnormality. The R.B.C. was 2,930,000 with 7.6 grams of hemoglobin. Bleeding and clotting times were normal. Urinalysis was negative except for 2+ albumin.

During the next three days the patient received five blood transfusions which restored her hemoglobin to 10.5 grams. There was some relief of

symptoms and after the first hospital day there were no further bloody stools. On the third day the patient again became apprehensive, blood pressure was 130/70. During that night she became unresponsive, respirations were shallow and of the Cheyne-Stokes type, her skin was cold and perspiring, her pulse weak and color poor. On the morning of the fourth hospital day her blood pressure was unobtainable and in spite of 500 cc. of whole blood and 250 cc. of saline intravenously, her respirations ceased.

DISCUSSION BY DR. WALDO A. CLAPP

We have a 65-year-old woman who was admitted to the hospital because of massive rectal hemorrhage from which she expired. There are three main types of rectal bleeding. The first, "occult" (hidden), blood in the stool which is not noticed by the patient nor is it discovered by gross examination of the stool. The second type is called "melena" which is described by the patient as tarry stool. This type arises from high in the gastrointestinal tract and is changed by the digestive juices so that its consistency is tarry when the stool is expelled by the patient. The third type is "frank blood" which may or may not be clotted, usually arising in the large bowel; severe hemorrhage, however, arising higher in the gastrointestinal tract, may still be apparent as fresh blood in the stool, clotted or unclotted.

We have here a massive hemorrhage which had clotted at the time it was expelled with the stool. In discussing such bleeding, one should first consider lesions of the colon and of the ano-rectal junction such as hemorrhoids, fissures, and fistulas which are frequently overlooked. Bleeding from these lesions, however, is usually fresh, unclotted blood, which is passed with the stool or soon after. Now in this case we have not ano-rectal bleeding; this is clotted blood. Next one should consider lesions of the colon giving rise to a large hemorrhage. The first are neoplasms, malignant and benign. It must be remembered that 80% of the carcinomas of the large bowel are within reach of the sigmoidoscope; and 60% are within reach of the examining finger. This patient has had a sigmoidoscopy. Therefore, 80% of these lesions would have been ruled out by this examination (sigmoidoscopy). Of the benign lesions, polypi are most common and may be multiple or solitary. Bleeding as the initial symptom is not an uncommon occurrence and a solitary polyp could be the cause of this massive rectal hemorrhage. Chronic inflammations of the large bowel, such as idiopathic ulcerative colitis, or ulcerations of amebic or bacillary dysen-

tery must be considered. However, these would have been ruled out by sigmoidoscopic examination and barium enema. Of the acute infections, amebic or bacillary dysentery can be the cause of massive rectal hemorrhage. However, one would expect diarrhea and signs of toxicity.

It is noted that the patient had had pelvic surgery performed five years previously. A hysterectomy was performed for vaginal bleeding. When I first read this without noting the pathologic report, I thought this was the clue, that the patient might have had a carcinoma of the uterus, carcinoma of the ovaries, or endometriosis extending to the sigmoid at that time; and that she now had an extension of this process which had invaded the sigmoid colon. However, in the next sentence, one gathers that the specimen at that time was benign, consisting of a fibroid uterus and sclerotic tubes and ovaries.

One should next consider lesions higher up in the gastrointestinal tract, such as ruptured esophageal varices, peptic ulcer, or carcinoma of the stomach. I believe these are unlikely because there was no history of upper gastrointestinal symptomatology. Lesions of the small bowel must then be considered as the most likely site of this patient's bleeding. Carcinoma is relatively uncommon in the small bowel. However, chronic inflammatory lesions, such as segmental enteritis or terminal ileitis are more common. However, one would expect to find symptoms of intestinal obstruction rather than bleeding as the initial symptom. Other chronic inflammatory lesions are ulceration within Meckel's diverticulum and Boeck's sarcoid. Bleeding from ulcer within Meckel's diverticulum certainly can be massive, and, therefore, can be evidenced by clotted, unchanged blood when passed through the rectum.

From the medical history it is noted that the patient had dyspnea on exertion and had been told that she had hypertension, which may be of significance in that a ruptured vessel such as a varix, or bleeding from a hemangioma, would have been aggravated by her hypertension. Blood dyscrasias as the cause of gastrointestinal bleeding are ruled out by the presence of normal bleeding and coagulation times. I believe it is not necessary to do any other blood studies to rule out bleeding tendencies. The urinalysis was negative except for 2 plus albumin. The R.B.C. was 2,930,000; hemoglobin 7.6 grams on admission and blood pressure 130/70 which is probably low for this patient and is consistent with massive rectal hemorrhage.

The family history is of no value. Mother died of pernicious anemia, brother died of Bright's disease, and father died of "old age."

The physical examination is of no help in that the abdomen was obese. No tumors were noted. We have a note that pelvic and rectal examinations were

not contributory. However, the patient had a gastrointestinal X-ray and sigmoidoscopy three months previously which were negative.

In conclusion I would say that the patient died from a massive gastrointestinal hemorrhage and on the basis of a negative X-ray and sigmoidoscopy, we would leave out the large bowel and call this upper gastrointestinal bleeding. The liver was not palpable and there were no symptoms referable to the stomach, duodenum, and esophagus, such as indigestion or vomiting of blood. I believe then that the woman died from a massive gastrointestinal hemorrhage arising in the small bowel. It has bled approximately once a year during the past 15 years. Because of this I believe that it was not a malignant process, but rather benign. Causes of hemorrhage from the small bowel on a benign basis are segmental enteritis, Boeck's sarcoid, bleeding from Meckel's diverticulum, polyps, vascular accident, such as mesenteric thrombosis or a rupture of a mesenteric marginal vessel. It is impossible for me to make any definite diagnosis, but for the sake of commitment, I would suggest the diagnosis, "Boeck's sarcoid."

Dr. Steele: How often does clotted blood in the stool come from the small intestine?

Dr. Clapp: Only if the hemorrhage is massive.

Dr. Allen: Do you think this woman should have been operated on as a diagnostic measure?

Dr. Clapp: She should not have been operated on until one could determine the location.

Dr. James: I saw a case recently with a story similar to this. The patient was submitted to surgery and a small intestinal lesion was found. The patient is alive and well at present.

Dr. Clapp: I assume that the condition of the patient was such that operation was inadvisable. She was hypertensive and had massive bleeding. If her bleeding had stopped and the response to early treatment been more satisfactory, surgery might have been considered. A case of this sort taxes one's judgment considerably.

PATHOLOGIC DISCUSSION

This patient presented an unusual lesion, located at about the midportion of the ileum. The intestine was kinked at this point, with moderate thickening of the serosa near the mesenteric attachment, presenting the appearance of a "knuckle." Opening the ileum revealed a firm yellow-gray mass 3 x 2 x 1.5 cm., located mainly beneath the mucosa, producing ulceration, and invading the muscularis. The mass was situated on the mesenteric side of the bowel. There was a necrotic mass 4 cm. in diameter in the superior portion of the right lobe of the liver, obvi-

Continued on page 294

THE PRESIDENT'S PAGE

Two matters, of major importance, should command the prompt, careful and personal attention of all our members:

1. The proposed plan for voluntary insurance coverage of surgical and obstetrical services.

Maine, as a state, is well in the rear in time only in setting up a plan for prepaid medical services. To date, the seeming delay has meant no real loss. Voted approval and authority by the House of Delegates last June, the Committee has been working long and arduously to formulate a workable system, soon to be presented to the members of the State Association. Despite any seeming inequalities which may be present, the proposed plan seems definitely suited for the largest possible numbers. It is to be hoped that there will be personal support from all members to put the plan into successful operation.

2. The National Physicians' Committee.

Not too soon can we inaugurate plans for voluntary insurance. Not too soon can we increase our support of the National Physicians' Committee, through the Maine group. Oscar Ewing's report of September 2, 1948, to President Truman, unqualifiedly recommends *compulsory* health insurance as a national *Must* in Federal plans for health legislation. In order to meet this renewed threat of Federal control, the National Physicians' Committee has issued an appeal to all medical men for interest and financial assistance.

To keep Maine in a position of medical strength and stability, it is urged again that each of our members give full support to the insurance plans when presented and, also, give prompt and generous financial contributions through the Maine Physicians' Committee to the National Physicians' Committee.

FORREST B. AMES, M. D.,
President, Maine Medical Association.

EDITORIALS

Why We Should Support the "Journal"

Congratulations to the sponsors of the August issue of the JOURNAL—the Maine General Hospital number. This is the first edition of the new plan under the enlarged Editorial Board.

In answering the statement "Why we should support the JOURNAL" it might be well to ask ourselves "How can we support the JOURNAL?"

We can give support first by reading the JOURNAL. One cannot read the August issue without feeling a sense of betterment. The articles are readable, clear, informative and leave one with the feeling that he has learned something new or has brushed up on facts somewhat forgotten.

In the quite recent past it has been suggested that the JOURNAL OF THE MAINE MEDICAL ASSOCIATION combine with the *New England Medical Journal*.

This should not be done.

First, because we should retain our individuality as a state organization and support our own JOURNAL.

Second, from a practical standpoint the JOURNAL is necessary as a means of conveying information. Without it we would have to send out circulars and letters listing the programs of the annual meetings, the fall clinical sessions, the

county meetings, the listing of the delegates, the councilors, the county officers, the members, the officials of the state organization and numerous other details. This would entail expense nearly equal to that of the JOURNAL.

Distant pastures always look greener. However, we have able men in the state, in medicine, surgery and the specialties and with their contributions to the JOURNAL it can become outstanding and rank well with other state journals as it has in the past.

The purpose of the JOURNAL is a practical one.

From a scientific standpoint it does not mean that papers have to be a factual report of scientific research, leave that to the research centers. It does not mean that the articles must be a report of original work necessarily.

The purpose is to convey to the members of the Maine Medical Association the record of cases and experiences that are of value.

Let's all support the JOURNAL by reading it and contributing when possible.

More power to the JOURNAL.

R. A. GOODWIN,
President-Elect.

Clinical Session Program Offers Opportunity to Continue Medical Education

T. Duckett Jones, M. D., Medical Director of the Helen Hay Whitney Foundation, Boston, will speak on "Rheumatic Fever" at the Clinical Session banquet, Monday evening, November 1, at 8.00 P. M., in the Eastland Hotel Ballroom.

Grantley W. Taylor, M. D., Assistant Professor of Surgery, Harvard Medical School, will wind up the two day session with an address on "What Can be Accomplished in Cancer Therapy", on Tuesday afternoon, November 2, at 3.15 P. M.

These are just two of the many outstanding features of the clinical session program, consisting of clinics at the Maine General Hospital, Maine Eye and Ear Infirmary, and Mercy Hospital from 9.00 to 12.00 each morning, and Scientific Sessions in the Eastland Hotel Ballroom from 2.00 to 5.00 in the afternoon. The program is published elsewhere in this issue of the JOURNAL, on colored pages so that you can't miss it, and a copy mailed to each member

of the Association—consequently it is not necessary for me to go into any further elaboration of the program—it speaks for itself.

The Council of the Maine Medical Association will meet in the Eastland Hotel on Monday, November 1, at 2.00 P. M., the Special Committee Chairmen at 3.00 P. M., and the County Secretaries at 4.00. It is hoped that all members of these groups, whose duties are of such vital importance to the Association, will make a special effort to be present at these meetings. It is also hoped that any member of the Association who has any question to present to any of these groups will do so previous to the meeting—in writing, to your State Association Secretary, Dr. Frederick R. Carter, 142 High Street, Portland 3, Maine.

If you have not made arrangements to attend this meeting—do so today and take advantage of this opportunity to continue your medical education.

ONE ANSWER TO THE NURSING PROBLEM

CLYDE I. SWETT, M. D., Island Falls, Maine

Maine has a nursing problem. The apparent shortage is largely due to several economic factors. National statistics tend to show us that there are actually sufficient numbers of nurses to do the job but there are many factors related to that job under present economic conditions that make the job unattractive, especially in our hospitals.

Many feel that the graduate nurse of today has been exploited and that there are many rights and privileges connected with her profession that should be established before she can again practice her profession with the same degree of enthusiasm and self-sacrifice that she has shown in the past.

The factors largely responsible for this apparent shortage include questions of more equitable salaries, shorter working hours, overtime pay, holidays and vacations with pay, better living conditions, provisions for off-duty relaxation and recreation, income retirement provisions, social security, and restriction of work to professional duties for which she has the special training.

There are, of course, other factors, such as social conditions, which bear on the general situation. But the feeling is that the romance and ideals of nursing are being strangled by the great economic pressure that is being brought to bear upon the nursing profession through the demands for women by our American industries. With the higher salaries and better working conditions offered the average working girl, without the need for the expense and sacrifice of time necessary to prepare oneself for a nursing career, many of our girls are turning their backs to nursing as a profession.

Within the ranks of the nurses themselves, there is much dissatisfaction which has a great deal to do with the loss of the "allure of the Nightingale Pledge" in the eyes of her younger sister who today has listened—and so is seeking greener and, what seem to her, more exciting fields of endeavor.

On the other hand, there is the distressing picture of our community hospitals in Maine. With the great increase in demands for hospitalization by the public, the expensive equipment necessary to modern therapy, the higher costs of operation and maintenance and the difficulty in maintaining adequate personnel in all departments, no matter how sincerely hospital boards may desire to meet the justified demands of the nursing profession, the financial conditions now existing make it increasingly difficult to comply with any degree of adequacy.

This, then, is not just a temporary problem of economics but a condition which must be met in its entirety if we are to have a truly stabilized and permanent relief to our present nursing problem.

With the above general but brief orientation as to the reasons behind our present nursing shortage in mind, it would seem that the first approach should deal with relief of the load carried by hospitals in maintaining adequate bedside care; thereby releasing the graduate nurse from simple duties that might just as well be performed by less highly trained personnel and making her time available for supervisory activities and more specialized types of treatments which have now become routine armament in modern hospital care. This would result in a decrease in the hospital's financial burden and help in no small measure toward attaining the objectives desired. In addition, it would at the same time insure adequate bedside care to every patient.

According to the recent Hospital Survey made by the State Department of Health, there are at least 45 small rural hospitals in the State. In order to maintain the standards of nursing required, training schools for nurses are largely limited to the larger hospitals. The smaller community hospitals are not only unable to furnish a teaching program that is satisfactory to standards required for regular schools of nursing, they cannot individually meet the minimum standards set up for an approved attendant nurse training school.

The status of the graduate nurse has changed. Schools of nursing are being restricted more and more to the larger medical centers. Many of the courses are five-year courses arranged in conjunction with universities for the requirement of a B.A. degree in nursing.

This means that higher scholastic qualifications are necessary; that greater financial obligations must be met by the student. Accordingly, fewer numbers of applicants will be available. Graduates of such schools will and should demand higher wages. They will be available to hospitals as supervisors and in specialty work only in the majority of cases. Our hospitals, especially the smaller ones, are not financially able to use all graduate nurses for routine ward and bedside care. In other words, our graduate nurse of today is becoming a specialist, highly trained in a supervisory and specialty capacity.

This change for the betterment of the nursing profession has created a new nursing problem—the need for a general practitioner in nursing; a group less highly trained that would become available for bedside care and home nursing under definite nursing limitations; a group that would help in the care of the patient under the direction and supervision of the graduate nurse. Such a group, called the licensed trained attendant nurse, has a definite place in the nursing world today.

Even a casual survey of the State shows that most rural communities and small hospitals are at the present time left largely to their own resources. They are unable to train their own graduate nurses. The urban hospitals are unable to train graduate nurses for rural areas for they are not able to train sufficient numbers for their own needs. Further than that, they are unable to create a desire in the trained graduate nurse to leave her urban area for the practice of her profession in rural communities where there are few social inducements. There is no question but what something must be done about the situation even though it may be only a start.

The nursing profession was among the first to see this great need for attendant nurses in the nursing program of the State. Their first step was the acquiring of legislation for the licensing of qualified attendant nurses. This was soon followed by the preparation of their "Minimum Standards For Nursing Attendant Schools Accredited in Maine."

The next step, obviously, is to have such accredited attendant nurses' schools in operation as soon as possible and in sufficient numbers to fill the steadily increasing demand. In looking over the "Minimum Standards" set up for such schools, it becomes readily apparent that there are very few rural hospitals indeed that can by themselves fulfill these requirements, so that the cooperative effort of a group of hospitals in forming such a training school seems to be the proper solution. In order to make such an arrangement not only practical but efficient and properly supervised, the following plan is proposed as a possible answer.

The State would be divided into four districts or regions, based upon areas served by our four normal schools, and an Attendant Nursing School Association would be organized in each district. Although each district association would have its own by-laws and regulations for its operation, the four district associations would be under the jurisdiction of a State Board of Attendant Nursing Education consisting of the Commissioner of Education, Member of the Board of Registration of Nurses, Member of the Maine Nurses' Association, Member of the Maine Hospital Association, Member of the Maine Medical Association, Commissioner of Health and Welfare and a business or professional man, not a practitioner of the healing arts, to be appointed by the Governor.

The State Board of Vocational Education would establish the course of Attendant Nursing Education, under the State Department of Education, for each of the four districts in accordance with the recommendations of the State Board of Attendant Nursing Education.

After the establishment of the District Attendant Nursing School Association, each properly qualified hospital in the area would be invited to participate in

the program. Each participating hospital would have representation on the District Board of Directors and this Board would be responsible for furnishing adequate instruction to the students of the local District Attendant Nursing School.

Each District Attendant Nursing School Association would have a Planning Board to aid in publicizing the work and recruiting the students for the school. This Planning Board should be composed of representatives of all major local agencies interested in community health problems.

The Attendant Nursing School course in each district would be a one-year course consisting of twelve weeks probationary theory study at the normal school and the remainder of the year in field practice in the participating hospitals on a rotating system. Each one of these hospitals would furnish instruction in at least one phase of the training course.

The probationary study in the normal school would be under the instruction of a qualified instructor of home economics and a qualified graduate nurse. The latter would also act as the Field Supervisor during the period of hospital training.

The graduate of the Attendant Nursing School would be entitled to the diploma, cap and pin of the school and would also be eligible for examination by the State Board of Registration of Nurses for licensure in the State.

Placement Boards should be established in each district for the registration of each licensed attendant nurse so that doctors, hospitals and communities could have a central local clearance bureau for the employment of attendant nurses. This would have the additional value of tending to establish and maintain proper control over the working conditions, salaries, etc., of this group, thereby lessening the chaotic conditions we now find where the untrained, unlicensed so-called practical nurse offers her services at the same rates charged by our graduate nurses.

The following rules and regulations, including the type of work for which attendant nurses shall be deemed competent, should be defined by the State Board of Vocational Education as recommended to it by the State Board of Attendant Nursing Education:

Limitation of Practice:

1. Care for the mildly or chronically ill, or for aged or convalescent patients.
2. Care for mother and baby on discharge from hospital, and also to act as cook and housekeeper.
3. Bedside care and routine work in hospitals not requiring technical skill and knowledge of a registered nurse.

Qualifications for Admission:

1. Completion of one year of high school or its



constipation due to inactivity

IN CONVALESCENCE . . . SENESCENCE

The inactivity following surgery or disease, and often encountered in the aged, makes constipation a likely occurrence. Dehydration, too, frequently is a significant contributing factor.

When the "smoothage" of Metamucil is employed in the management of constipation, normal evacuation is permitted without irritation or undue pressure on sutures and incisions. Thus straining is minimized.

Metamucil promotes smooth, normal evacuation by furnishing a non-irritating water-retaining colloidal residue in the large bowel.



METAMUCIL® is the highly refined mucilloid of *Plantago ovata* (50%), a seed of the psyllium group, combined with dextrose (50%), as a dispersing agent.

RESEARCH IN THE SERVICE OF MEDICINE

SEARLE

One Answer to the Nursing Problem—Continued from page 292

equivalent. Applicants over thirty may be admitted on completion of the eighth grade or its equivalent.

2. An applicant shall have passed her 19th birthday and shall not have passed her 50th birthday.

3. Good physical and mental health are essential as shown by a health examination, including accepted diagnostic and preventive procedures.

4. Applicants must possess desirable personal qualities and attitudes.

Finance:

1. Students shall pay a tuition fee of \$100.00 in advance of training.

2. Students shall receive \$2.00 per day remuneration after completion of the twelve weeks probationary training course at the normal school, the same being paid by the affiliating hospital where the student is taking her field practice at the time.

3. Each student shall have deducted from her weekly remuneration from each hospital where she is training at the time, the amount of \$2.25 which is to be applied to the cost of her board and room for the twelve weeks while attending the normal school.

4. Students shall be furnished their uniforms and textbooks by the training school.

5. Students shall be furnished their board, room

and uniform laundry by the affiliated hospital where she is taking her field practice at the time.

Minimum Requirements in Theory:

	<i>Hours</i>
1. Behavior and working relationships	10
2. Care of self ; physical, mental and social	10
3. Bedside nursing	100
4. Housekeeping	30
5. Planning, preparing and serving of meals	60
6. Care of mother and newborn infant	15
7. Care of well child	15
8. Care of convalescent, chronic and aged patient	10
	250

The above plan, which has been given in this article in outline form only, has been presented to the Maine Nurses' Association, the Maine Hospital Association, the Maine Medical Association, the State Department of Health and Welfare and the State Department of Education for their consideration, recommendations and revisions, and each one of these groups are giving it their careful study and appraisal. It is to be hoped that something constructive will eventually be decided upon that will be a means toward relieving the present shortage of nursing care in the State of Maine.

Clinico-Pathological Exercise—Continued from page 288

ous on the surface. No other evidence of tumor was found. The heart showed hypertrophy and dilatation consistent with hypertension, and there were moderate arteriosclerotic changes in most vessels.

Microscopically, the sections are characteristic of a carcinoid tumor or chromaffinoma. The cells show relatively slight anaplasia, and only rare mitotic figures are present. Both lesions show an identical picture. Tumors of this type are thought to arise from Kulchitsky cells, found abundantly in the appendix and cecum and in smaller numbers elsewhere in the gastrointestinal tract. The tumors have been described as occurring in the rectum, stomach, and many points between these two. They are generally benign, but involvement of regional nodes is found in about 10% and distant metastases in 1%.

Dr. Brooks: What is Boeck's sarcoid?

Dr. Goodof: Boeck's sarcoid is a chronic granulomatous process often generalized, but primarily involving lungs, lymph nodes, bones, and skin. The lesion microscopically resembles a tubercle, with giant cells and epithelioid cells. There is usually no caseation or surrounding cuff of lymphocytes. A vessel is often present in the center of the lesion. Tubercle bacilli have not been identified in these lesions.

Dr. Greene: Perhaps more adequate exploration at the time of previous surgery would have revealed the presence of this process.

Dr. Goodof: It would have been difficult to locate, since the lesion is small, and produced relatively little change in the peritoneum.

Only seven states—Colorado, Connecticut, Massachusetts, Michigan, North Dakota, Rhode Island and Wisconsin—have two and a half or more beds available for the tuberculous per annual death from tuberculosis.—Mary Dempsey, NTA.

The tasks of health education are not merely to teach the facts of the modern science of hygiene but ultimately to persuade men to supply these facts.—*Motivation in Health Education.* Iago Galdston, M. D., Columbia Univ. Press, 1948.

Program

CLINICAL SESSION MAINE MEDICAL ASSOCIATION

PORTLAND, MAINE

NOVEMBER 1ST AND 2ND, 1948

Headquarters—Eastland Hotel
157 High Street, Portland, Maine

CLINICS

Maine General Hospital

Maine Eye and Ear Infirmary

Mercy Hospital

SCIENTIFIC SESSIONS AND BANQUET
Eastland Hotel Ballroom

Sponsored by The Cumberland County Medical Society

COMMITTEE ON ARRANGEMENTS

Ralf S. Martin, M. D., Chairman

Jack Spencer, M. D.

James M. Parker, M. D.

William A. Monkhouse, M. D.

Charles H. Gordon, M. D.

Thomas A. Martin, M. D.

S. Judd Beach, M. D.

Registration

EASTLAND HOTEL LOBBY

Monday, November 1—8.00 A. M.-8.00 P. M.

Tuesday, November 2—8.00 A. M.-5.00 P.M.

Program

Monday, November 1, 1948

Morning Session

MAINE GENERAL HOSPITAL

9.00-11.30

Surgical Conference on Lesions of the Gastro-Intestinal Tract and Current Surgical Problems.

11.30

Review of Brain Tumors Encountered in a Two-Year Period at the Maine General Hospital. Presented by the Neuro-Surgical Service.

MAINE EYE AND EAR INFIRMARY

9.00-12.00

1. Differential Diagnosis of Glaucoma from the Standpoint of the General Practitioner.
2. Eye Manifestations of General Systemic Diseases.
3. Recognition and Treatment of Abnormal Eye Conditions in Children.
4. Operating Clinic will be held for those interested in Ophthalmology.

MERCY HOSPITAL

9.00-12.30

Orthopedic Clinic

- | | | |
|-------------|---|---|
| 9.00 | Fractures of the Carpal Scaphoid | Leo J. McDermott, M. D. |
| 10.00-10.15 | INTERMISSION | |
| 10.15 | Tendon Injuries of the Hand and Wrist with their Treatment | Leo J. McDermott, M. D. |
| 11.00 | Traumatized Ankles and Feet with Presentation of Cases | Thomas A. Martin, M. D.
William A. Monkhouse, M. D. |
| 12.15 | Discussion of Interesting and Unusual Orthopedic Problems. Study of X-ray films. Doctors are invited to present films for discussion. | William L. Casey, M. D.
Thomas A. Martin, M. D.
G. E. C. Logan, M. D. |

LUNCHEON — 12.30 P. M.

Maine General Hospital

Afternoon Session

EASTLAND HOTEL BALLROOM

2.00-5.00

- | | | |
|------|--|--|
| 2.00 | Treatment of Syphilis | Dean H. Fisher, M. D.,
Augusta, Maine |
| 2.30 | Acute Respiratory Distress — Its Cause and Treatment | Eugene H. Drake, M. D. |

3.00	Selection of Patients for Anesthesia and Surgery	John R. Lincoln, M. D
3.30- 3.40	INTERMISSION	
3.40	Convulsive States	George L. Maltby, M. D.
4.10	Recent Trends in Antibiotic Therapy	Philip P. Thompson, Jr., M. D.,

Evening Session

8.00 P. M.

Banquet (Ladies Invited) — Eastland Hotel Ballroom

Speaker: T. Duckett Jones, M. D.,
Medical Director
Helen Hay Whitney Foundation
Boston, Massachusetts

Subject: Rheumatic Fever

Tuesday, November 2, 1948

Morning Session

MAINE GENERAL HOSPITAL

9.00-11.00	Medical Service Grand Rounds	
11.00	Clinical Value of Cerebral Angiography with Case Presentations	W. Henry Harper, M. D.
11.30	Case Presentations by Pediatric Service	

MAINE EYE AND EAR INFIRMARY

9.00-12.00

1. Swimming and its Effect on Ears and Sinuses.
2. Allergic Rhinitis
3. Sulfonamides and Penicillin in Diseases of the Ear, Nose, and Throat
4. The Common Cold
5. Deafness in Children Following Unoperative Mastoiditis

MERCY HOSPITAL

9.00-12.00

Clinic on Obstetrics and Gynecology

9.00	Endometriosis	Eugene E. O'Donnell, M. D.
9.30	Sterility	C. E. Skillin, M. D
10.00	The Use of Stilbestrol and Testosterone in Suppression of Lactation	Francis M. Dooley, M. D.
10.30-10.45	INTERMISSION	
10.45	Placenta Praevia	John V. Ward, M. D. Lawrence W. Conneen, M. D G. E. C. Logan, M. D.,
11.15	Obstetrical Anesthesia	Eugene C. McCann, M. D.
11.45	Post Partum Hemorrhage	K. Alexander Laughlin, M. D.

OVER

Mercy Hospital

LUNCHEON — 12.30 P. M.

Afternoon Session

EASTLAND HOTEL BALLROOM

2.00-5.00

- | | | |
|------|--|---|
| 2.00 | Symposium on Cancer | |
| | 1. Results in Treatment of Lymphomas with Nitrogen Mustards | C. Lawrence Holt, M. D. |
| | 2. Chronic Hoarseness | George O. Cummings, M. D. |
| | 3. Diagnosis and Results of Treatment of Carcinoma of the Breast | James M. Parker, M. D. |
| | 4. Diagnosis and Results of Treatment of Carcinoma of the Cervix | Theodore C. Bramhall, M. D. |
| | 5. Diagnosis and Results of Treatment of Cancer of the Rectum | Isaac M. Webber, M. D. |
| 3.15 | What Can Be Accomplished In Cancer Therapy | Grantley W. Taylor, M. D.,
Assistant Professor of Surgery,
Harvard Medical School |

Special Notices

Monday, November 1, 1948

*COUNCIL—Maine Medical Association:

There will be a meeting of the Council of the Maine Medical Association in the Eastland Hotel at 2.00 P. M.

*SPECIAL COMMITTEE CHAIRMEN—Maine Medical Association:

There will be a meeting of Special Committee Chairmen of the Maine Medical Association in the Eastland Hotel at 3.00 P. M.

*COUNTY SECRETARIES—Maine Medical Association:

There will be a meeting of County Secretaries in the Eastland Hotel at 4.00 P. M.

* Inquire at Association Registration desk for place of meeting.

Tuesday, November 2, 1948

CARDIAC CLINIC:

The regular meeting of the Cardiac Clinic will be held at the Maine General Hospital at 11.00 A. M. Those interested in cardiology are invited to attend.

PORTLAND MEDICAL CLUB—EASTLAND HOTEL—8.15 P. M.:

Members of the Maine Medical Association are invited to attend the regular monthly meeting of the Portland Medical Club to be held in the Eastland Hotel, Tuesday evening, November 2nd at 8.15 P. M.

PROGRAM—Accidental Poisoning in Children

- | | |
|-----------------------|-----------------------------|
| 1. General Discussion | Thomas A. Foster, M. D. |
| 2. Diagnosis | Alice A. S. Whittier, M. D. |
| 3. General Treatment | Lloyd W. Bishop, M. D. |
| 4. Specific Treatment | Ralph Heifetz, M. D. |

COUNTY SOCIETIES**Androscoggin**

President, Paul R. Chevalier, M. D., Lewiston
 Secretary, Glidden L. Brooks, M. D., Lewiston

Aroostook

President, Gerald H. Donahue, M. D., Presque Isle
 Secretary, Clyde I. Swett, M. D., Island Falls

Cumberland

President, Harold J. Everett, M. D., Portland
 Secretary, Joseph E. Porter, M. D., Portland

Franklin

President, Maynard B. Colley, M. D., Wilton
 Secretary, Kenneth A. LaTourette, M. D., Farmington

Hancock

President, M. A. Torrey, M. D., Ellsworth
 Secretary, Robert H. Delafield, M. D., Ellsworth

Kennebec

President, William L. Gousse, M. D., Fairfield
 Secretary, Arch H. Morrell, M. D., Augusta

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President, Wesley N. Wasgatt, M. D., Rockland
 Secretary, Freeman F. Brown, Jr., M. D., Rockland

Lincoln-Sagadahoc

President, Virginia C. Hamilton, M. D., Bath
 Secretary, Neil L. Parsons, M. D., Damariscotta

Oxford

President, Willard H. Boynton, M. D., Bethel
 Secretary, Dexter E. Elsmore, M. D., Dixfield

Penobscot

President, Martin C. Madden, M. D., Old Town
 Secretary, Herbert C. Scribner, M. D., Bangor

Piscataquis

President, George C. Howard, M. D., Guilford
 Secretary, Norman H. Nickerson, M. D., Greenville

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President, Maurice E. Lord, M. D., Skowhegan
 Secretary, Edwin M. Lord, M. D., Skowhegan

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President, John A. Caswell, M. D., Belfast
 Secretary, Raymond L. Torrey, M. D., Searsport

Washington

President, Willard H. Bunker, M. D., Calais
 Secretary, Karl V. Larson, M. D., East Machias

York

President, Paul S. Hill, Jr., M. D., Saco
 Secretary, C. W. Kinghorn, M. D., Kittery

COUNTY SOCIETY NOTES**Hancock**

A regular meeting of the Hancock County Medical Society was held at the Hancock House, Ellsworth, September 8, 1948, at 6.30 P. M.

There were ten members present. Dr. Stanley Nowak, speaker of the evening, and Mr. W. Mayo Payson, Executive Secretary of the Maine Medical Association, were guests of the society.

Dr. Nowak presented a paper on "Hypertension and Its Treatment," which was followed by a period of discussion.

ROBERT H. DELAFIELD, M. D.,
Secretary.

Kennebec

The Gardiner meeting of the Kennebec County Medical Association was held at the Augusta House, Augusta, September 16, 1948, with supper at 6.30 P. M.

Following a brief business meeting President Gousse requested Dr. Francis A. Sleeper to introduce the speaker of the evening, Dr. A. Warren Stearns of Boston. Dr. Stearns spoke on "Why People Fail." He discussed the early economic organization of society—mentioned the caste system—traced the development through the ages—described the life of the individual from babyhood through the plastic age of childhood—adolescence—the productive and re-productive period of maturity then senility. A portion of society for a variety of complicated reasons fail—mental and physical basis—temperamental—maladjustments. He pictured the social welfare trend—a small portion of the population supporting the majority—all this must be studied and legislation enacted to solve it.

There were 43 members and guests present.

A. H. MORRELL, M. D.,
Secretary.

Lincoln-Sagadahoc

A meeting of the Lincoln-Sagadahoc Medical Society was held Tuesday evening, September 14, 1948, at the Bath Country Club, Bath.

Dr. Francis A. Winchenbach, of Bath, spoke relative to socialization of medicine and suggested a joint meeting with the dentists to fight this encroachment.

A discussion of Medical and Surgical Cares was presented by Dr. Philip H. Sylvester, Dr. Harry M. Wilson and Dr. Winchenbach.

Dr. Wade, local dentist, was a guest of the society.

NEIL L. PARSONS, M. D.,
Secretary.

Piscataquis

The annual meeting of the Piscataquis County Medical Association was held September 16, 1948, at the Milo Hotel, Milo. Previous to the meeting a case was presented by Dr. Harvey C. Bundy, of Milo, at his office. This case was presented in a most pleasing and refreshing manner.

The following officers were elected for the coming year:

President, John B. Curtis, M. D., Milo.

Vice-President, Philip B. Thomas, M. D., Monson.

Secretary-Treasurer, Norman H. Nickerson, M. D., Greenville.

Delegate to the Maine Medical Association, Dr. Ralph C. Stuart, M. D., Guilford; Alternate, Dr. Thomas.

Legislative Committee: Drs. Harvey C. Bundy (1949), Francis W. Bradbury (1950), and Howard Pritham (1951).

Board of Censors: Drs. Thomas (1949), Guy E. Dore (1950), and Linus J. Stitham (1951).

N. H. NICKERSON, M. D.,
Secretary.

Washington

A meeting of the Washington County Medical Society was held September 9, 1948, at the Johnson House, Dennysville, Maine, with seventeen members and one guest present.

The meeting was called to order by the President, Willard H. Bunker, M. D., of Calais. He introduced Mr. W. Mayo Payson, the Executive Secretary of the Maine Medical Association.

Mr. Payson spoke relative to Prepaid Medical Care. He explained that this is a form of health insurance which will cover the doctor's fees. The present plan will apply only to the lower income groups and will cover surgery and obstetrics. This was followed by a period of discussion on Prepaid Medical Care.

Mr. Payson then went on to explain the important work of the Council and various committees, especially those on public relations and public health.

Norman E. Cobb, M. D., of Calais, Councilor for the Fifth District, spoke relative to Prepaid Medical Care and also about the work of the Council.

A business meeting was then held and fee schedules used by the various counties of the state were presented and brought up for discussion. James E. Bates, M. D., of Eastport, chairman of the Committee on Revision of Fee Schedules, was empowered by the president to appoint four men to aid in setting up a fee schedule.

Wesley F. Bosworth, M. D., of Calais, and Robert G. MacBride, M. D., of Lubec, were elected to membership.

At the invitation of John F. Hanson, M. D., of Machias, it was voted to hold the next meeting on Thursday, November 4, 1948, at the Dr. Hanson Farm, Kennebec District, Machias, with the program left up to the president and secretary.

KARL V. LARSON, M. D.,
Secretary.

New Member

Washington

Robert C. MacBride, M. D., Lubec.

HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

NEWS AND NOTES

Veterans Administration Center Togus, Maine

Schedule of Staff Conferences to be held on Wednesday of each week at 3.30 P. M. in Lecture Room 101 by each service alternately:

October 20, 1948—Roentgenology
October 27, 1948—Surgery
November 3, 1948—Medicine
November 10, 1948—Roentgenology
November 17, 1948—Surgery
November 24, 1948—Medicine
December 1, 1948—Roentgenology
December 8, 1948—Surgery
December 15, 1948—Medicine
December 22, 1948—Roentgenology
December 29, 1948—Surgery

American Federation for Clinical Research

The Eastern Section of the American Federation for Clinical Research will hold its annual meeting in Philadelphia, Pennsylvania, on Saturday, December 4, 1948, at the Temple University School of Medicine.

Department of Health and Welfare Services for Crippled Children Clinic Schedule — 1948

ORTHOPEDIC CLINICS

Portland — Maine General Hospital, 11.00 a. m.: July 12, Aug. 9, Sept. 13, Oct. 11, Nov. 8, Dec. 13.
Lewiston — Cenaral Maine General Hospital, 9.00-11.00 a. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.
Rumford — Community Hospital, 1.30-3.00 p. m.: Aug. 18, Oct. 20, Dec. 15.
Waterville — Thayer Hospital, 1.30-3.00 p. m.: Aug. 26, Oct. 28, Dec. 23.
Rockland — Knox County Hospital, 1.30-3.00 p. m.: Aug. 19, Nov. 10 (Wednesday).
Machias — Normal School, 1.30-3.00 p. m.: Aug. 11, Oct. 13, Dec. 8.
Presque Isle — Northern Maine Sanatorium, 9.00-11.00 a. m. — 1.00-3.00 p. m.: July 7, Sept. 14, Nov. 3.
Houlton — Aroostook General Hospital, 9.00-11.00 a. m.: July 6, Nov. 2.
Fort Kent — Normal School, 9.00-11.00 a. m. — 1.00-3.00 p. m.: Sept. 15.
Bangor — Eastern Maine General Hospital, 1.30-3.00 p. m.: July 22, Sept. 23, Nov. 18.

CARDIAC CLINICS

Portland — Maine General Hospital, 10.00-12.00 a. m.: Will be held every Friday with the exception of holidays.
Bangor — Eastern Maine General Hospital, 10.00 a. m.: July 23; Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.

HARD-OF-HEARING CLINICS

Waterville — Thayer Hospital, 1.30-3.00 p. m. Oct. 27.
By appointment only.

PEDIATRIC CLINICS

Bangor — Eastern Maine General Hospital, 1.30 p. m.: July 23, Aug. 27, Sept. 24, Oct. 22, Nov. 19, Dec. 17.
Waterville — Thayer Hospital, 1.30 p. m.: July 6, Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7.
Presque Isle — Northern Maine Sanatorium, 1.30 p. m.: July 21, Sept. 22, Nov. 17.
By appointment only.

MENTAL HEALTH CLINICS

The Division of Mental Health conducts monthly clinics for children and adults in the following cities:

Portland — Health and Welfare Office, 178 Middle Street, 1st and 4th Mondays.

Lewiston — Out-Patient — Central Maine General Hospital, 3rd Thursday.

Waterville — Out-Patient — Thayer Memorial Hospital, 3rd Friday.

Bangor — Out-Patient — Eastern Maine General Hospital, 1st Wednesday afternoon. Valentine School, Union Street, 1st Thursday.

Function — Consultation, diagnosis and adjustment of habit, behavior, personality and emotional disorders and school problems in children through the age of 17.

Adults — problems in general adjustment and personality.

Types of Difficulties to be Referred:

a. Habit disorders — Feeding problems, lack of bowel control, bed wetting, thumb sucking and nail biting.

b. Conduct disorders — Aggressive behavior, temper tantrums, anger, destructiveness, lying, stealing, truancy, masturbation and sexual perversions.

c. Emotional disorders — Stuttering, tics, fears and anxieties, night terrors, compulsive behavior, hysteria.

d. Psychosomatic disorders — Psychoneuroses (based on physical inferiorities), allergic and gastric disturbances, obesity.

e. School problems — Lack of adjustment to school, placement in grade, failure in one subject only, physical handicaps, day dreaming, inattention, Retardation.

Referral blanks should be sent to the Director, Division of Mental Health, Department of Health and Welfare, Augusta. Patients will be seen by appointment only.

Referrals may be made by any of the Divisions of the Department of Health and Welfare, Department of Education, private social agencies, school superintendents, private physicians and parents.

The Division maintains a traveling clinic which visits the following places at sometime during the year: Caribou and Presque Isle, Houlton, Lincoln, Machias, Old Town, Rockland, Rumford and South Paris.

Venereal Disease Clinics

The Department of Health and Welfare, Bureau of Health, maintains facilities for the diagnosis and treatment of venereal diseases in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford, Lewiston, Portland, Rockland, Rumford, Sanford, Waterville, Wilton and Winthrop.

Any physician wishing to refer an indigent person for diagnosis or treatment may obtain the name of the nearest clinic physician by contacting the Department of Health and Welfare, Bureau of Health, State House, Augusta, Maine. If no clinic facilities are available, physicians will be authorized to treat indigent patients in their offices. Authorization should be requested before treatment is started.

Proceedings

NINETY - FOURTH ANNUAL SESSION

Maine Medical Association House of Delegates

POLAND SPRING, MAINE

June 20, 21, 22, 1948

(Continued from the September Issue — Page 274)

CHAIRMAN AMES: At our House of Delegates meeting last year, the delegates voted that the President be empowered to appoint a committee from the State of Maine to work with the National Physicians' Committee. Dr. Martyn Vickers is Chairman of that Committee, and I am going to ask him to report at this time. Dr. Vickers!

DR. MARTYN VICKERS: First, I should like to report that the Committee collected approximately \$4,000.00 last year and the number of donors was in the vicinity of 180. I do not have the exact figures here, because the Secretary forgot them and left them at home but he is here and will verify the figure.

The only thing we have to report is that all legislation on public health was not reported out of committee. It was felt, and it was an unanimous report of the Committee, that further study was needed.

The thing that is important about the report is that it was unanimous, and signed by Murray and Pepper, and the men strongly in favor of nationalizing the medical program. The report did come out of the committee, and I think it makes this worthwhile, for the report was that due to the stimulus brought about by the socialization or nationalization program, there were many things that needed to be straightened out.

Now, there is a Committee appointed, which will really study on a scientific basis, we hope, the medical needs of the United States, and show them in the true light, and then have an answer to the program. It is hoped that the American Medical Association, which has been so above it all and haughty about all of this, will finally get off the horse and really make constructive suggestions and take an active part.

What has happened up to now is that all of these programs, as put forth, have been by people who are social service workers or by people who were socially-minded, and they were earnest and hard workers and very much set on this whole thing; but, the medical people have made no contribution to this at all.

The American Medical Association, which should be our leader, should appoint a committee with reference to this, and we should be proud of what they do.

The thing that has impressed me all through this whole thing is that many people who call themselves liberals would take the freedom from the American physicians and dole out medical service to the people. You know, it always impresses me when somebody tells me they are liberal, and then in the very next breath, they want to take away my liberty.

Now, the National Physicians' Committee sends you letters from time to time, to send your contributions in to them, and they ask you only to give what you can reasonably afford. You have done this very well, and I hope you continue to support the National Physicians' Committee.

Thank you very much. [Applause]

CHAIRMAN AMES: Thank you, Dr. Vickers. That report will be placed on file with our records.

You may be aware that your Delegate to the American Medical Association is now in Chicago, attending the meetings there, which explains why he is not here today to give us his report.

However, his report will be published in the JOURNAL after he comes back and is able to complete it for the records.

Also, our Executive Secretary, Mr. Payson, is in Chicago, but he expects to return tonight and be present at our meeting tomorrow afternoon. At that time he will give us his report of the year's work, and also some well-thought-out-plans for the work of the future which he will present to this association for consideration.

It is my understanding that as special committees are appointed from time to time by the House of Delegates, that being one of the powers given to them by the present By-laws, that those committees will be continued until such time as the work is completed and they are discharged; otherwise, they will be carried on with different personnel from time to time to take on other activities.

That covers the roster of the special committees. There is one that I want to take up again under new business, and I shall refer to that later.

We have, at this time, the pleasure of listening to the reports of the delegates to the New England State Society meetings during the past year. The first of these is Connecticut; Dr. Franklin F. Ferguson, of Portland, was the delegate.

DR. FERGUSON: Mr. President and members of the Society. I was privileged to attend the meetings of the Connecticut State Medical Society, during the last of April, and it was doubly my good fortune to be the appointed delegate as Dr. Marshall was not able to go.

The addresses were very constructive, and they were given by people of interest to me. I went to school at Yale.

The Secretary of the Journal there, Stanley Weld, sent his greetings to many members of this Society, and he expressed his regret that he would not be able to attend this meeting, due to the fact that the American Medical Association meeting is being held at this time in Atlantic City. Dr. James Miller, their President, and Dr. Creighton Barker, their

Executive Secretary, are known to many of you, and they also sent regards to many of you.

They have incorporated in their meetings some of the suggestions that Dr. Cobb has made today, to have a printed report of their budget and of their expense account, before the meeting, as well as the reports of their committees.

Like ours, their meeting was somewhat pointed towards subjects of interest to the general practitioner, or on aspects of the profession in which they might be interested.

Of special interest to me was the report of Dr. Ayer of Montreal, and Dr. Novak, in regard to the vaginal smear method of diagnosis of carcinoma. The scientific programs were well arranged, and in their cancer committee, they have taken active steps towards getting cancer diagnostic clinics, rather than tumor clinics, for treatment purposes.

I want to thank you very much for giving me this opportunity to go to the Connecticut meeting, for I enjoyed it very much. [Applause.]

CHAIRMAN AMES: Thank you, Dr. Ferguson.

Dr. Theodore E. Hardy, of Waterville, was our Delegate to the Massachusetts Medical Society, and we shall now hear from him.

DR. HARDY: Mr. President and members of the Maine Medical Association. The Annual Meeting of the Massachusetts Medical Society was held at the Hotel Statler in Boston on May 25, 26 and 27. Apparently, their Council and all of their business sessions take place the day before the meeting, so that the meeting is devoted almost entirely to a scientific program. The entire mezzanine floor of the Statler Hotel is turned over to the Society, and it was quite a good and adequate place to take care of the 2,000 and some odd members who registered, the scientific exhibits, and the commercial exhibits.

The program consisted of two general sessions daily; one in the morning and one in the afternoon. These were run off very well. The papers were excellent, for the most part, and they kept to the time limits very well.

On the second and third days, they have Secretaries' luncheons, which were well attended, and were a really worthwhile interlude in the program.

The Shattuck lecture, this year, was given by C. Stewart Welch, who has visited in Maine on several occasions. It was well attended, and his talk was good.

I enjoyed the Annual Dinner as much as anything. It was good to come from the State of Maine. The speaker was Mary Ellen Chase, and her subject was: "The Country Doctor on the Coast of Maine." It was very entertaining and very straightforward, and she portrayed our own member, Dr. Ray Bliss.

All in all, the scientific exhibits, as you might expect in a medical center, were excellent, well attended, and attractively placed, thus making a good showing. I wish that we might do more in the matter of scientific exhibits. The commercial exhibits were good, and remarkably well attended by the Massachusetts men. I think that that is something that we could carry over to our own exhibits here.

I enjoyed the privilege of attending this meeting of the Massachusetts Medical Society, and thank you very much. [Applause.]

CHAIRMAN AMES: Thank you, Dr. Hardy. Our delegate to the New Hampshire Medical Society was Dr. Paul S. Hill, Jr., of Saco.

DR. HILL: Mr. Chairman and members of the House of

Delegates. I attended the New Hampshire Medical Society's 157th Annual Convention at the Hotel Wentworth in Newcastle, New Hampshire, as your delegate.

The program consisted of Round Table Discussions in the forenoon in a very informal manner, and in the afternoon, there were a number of papers which were limited to twelve minutes. Some of the papers were most interesting, and they were given by members from the smaller communities.

The New Hampshire Medical Society agreed to sponsor a radio program called "Doctor's Orders."

A Civilian Defense Committee was set-up, and subsidiary committees in the county societies are being sponsored.

It was mentioned, on the political side of things, that Governor Earl Warren of California was reported to have come out for socialized medicine and was insisting on a plank in the Republican platform to that effect. The State Society wired Governor Warren, but received no reply.

The absence of all commercial exhibits at this meeting took something away from the meeting, I am sure. This was most apparent between programs, when the absence of the usual glitter and glamor was gone from their meetings.

I want to thank you for giving me a chance to be your Delegate to this convention. [Applause.]

CHAIRMAN AMES: Dr. Hill, I might make a comment here. The Maine Medical Association officials have been approached in connection with the radio program, "Doctor's Orders." Apparently, this is a well-balanced program, and entirely ethical, and it may be that if this is accepted by the Council, some of you men will be asked later to help out in the matter of broadcasts. It is entirely a voluntary procedure, but it is aimed along the same lines of improving public relations between the medical profession and the public.

Our Delegate to the Rhode Island Medical Society was Dr. William Holt of Portland.

DR. HOLT: It was a pleasure for me to be sent down to Rhode Island, because I had put in four years there, and I knew a large majority of the doctors.

The Rhode Island Medical Society has its own medical building, which is well adapted for medical meetings, and it has its full-time Secretary; I thought he was a doctor, at first, but I learned later that he is a layman, and his name is John E. Farrell.

Now, I do think that perhaps they suffer from having their meetings in the city. It looked as if the majority of the doctors were still carrying on their practice, especially during their office hours.

Their medical meeting, as conducted, consisted just of papers presented. If they had any business meeting, that part of it was conducted either before or after or outside the scientific meetings. The papers were excellent. The meetings were not too well attended.

On the first afternoon, I enjoyed very much Dr. Louis Phaneuf's paper and also Dr. Browne's paper. They had some papers after that, but Dr. Kemney from Pawtucket insisted upon taking Dr. Phaneuf and Dr. Browne and myself out for refreshments, and I enjoyed that part of it very much, too. Perhaps the reason for that is because Dr. Browne's son married my daughter. So I have got to give him a plug here. He really gave one of the best papers that I have ever heard. When Dr. Browne was confining himself to his paper, you could hardly hear what he was saying, but eventually he threw the paper aside and assumed an accident to the hand, and then he took it, step by step, and it was beautifully done.

By the way, I did hear him say that he would like to come down to Maine at some of the County society meetings; he said something about the suturing of nerves. Some of you Tufts men are familiar with him; he is known as Wild Bill Browne; but, certainly, in giving a paper, he is tops.

That evening, I got back to the hotel a little bit late, and Mrs. Holt was all dressed for the evening meeting which was held at the Narragansett Hotel. I learned, then, that it was strictly informal, and I told her so; but she was already dressed. As I have said, we were late, and I had to compromise and get into evening dress, as it were. So that Mrs. Holt and myself and the waiters were the only ones who were dressed properly! However, the room was jammed, and we had difficulty, even, in getting a seat. This meeting had all the politicians and the Governor and the Mayor, and it was the usual soft-soap and mush, and nothing much was said. However, I did expect a better paper from the President of the American Medical Association, when he addressed the group. He must be a politician. He is a very pleasant fellow, Dr. Bortz, and he gave a pleasing talk; either I wasn't in the mood for it or else I had my mind on waiting on table!

And, by the way, the first day there was a very beautiful morning, but it started raining that afternoon, and I guess it has rained ever since then.

The next day, the papers were very good. They had two recesses, one in the morning and one in the afternoon, at which time all of the exhibits were visited for a half an hour. This was on the program. I think that needs to be followed out, if we expect the exhibitors to be with us, because they really pay the freight. I do think that the medical association as a whole must give them more attention.

I think that the exhibitors like to come to Poland Spring because the doctors do get away from their offices, and they are more in a mood to sign their papers for them.

I left the Rhode Island meeting that afternoon, before the final papers were given, but on the whole, it was an excellent meeting, and I enjoyed being there very much, and I am very grateful for the opportunity to go down there. [Applause.]

CHAIRMAN AMES: Thank you, Dr. Holt. Dr. Carter visited the Vermont Medical meeting.

SECRETARY CARTER: I had the honor to go back to Vermont last fall, as Delegate from our Association to the Vermont Society. The meeting was held in Burlington, at the hotel there, the Vermont House. They elect their officers on the first day of the meeting.

Dr. Cooke, whom most of you know, was elected President, and he is from Rutland, and Dr. Roland McSweeney of Brattleboro was elected President-Elect.

The Scientific Sessions were held in the City Hall. Their commercial exhibits were not as good as ours, but they are handicapped, because they did not have the room.

The papers that were presented were very interesting. Dr. Richard Cattell gave a very interesting paper, as several others did. The clinics were held at the Mary Fletcher Hospital. The Annual Banquet was held at the Hotel Vermont, and Maine had two representatives there; I was about ready to go in when I ran across Bill Holt, so he escorted me in.

The Governor spoke on the rural health situation. He said that rural health in Vermont "stinks"; that was the way he put it. He gave an interesting talk, and we had a good dinner.

I wish to thank you for sending me. I enjoyed it very much. I spent four years in college there, and it seemed like getting back home again. [Applause.]

CHAIRMAN AMES: Thank you, Dr. Carter.

This concludes the routine part of our agenda this afternoon.

We have a few matters of new business which can be properly presented at this time, for the delegates to consider. I referred a moment ago to the Rural Health Committee. This was set up in November of 1947, by the Council, at which time it was voted that a Special Committee on Rural Health Activities be appointed to serve until the Annual Meeting in June, 1948, at which time the House of Delegates would be asked to continue that as a permanent Special Committee. If that meets with your approval, I should like a motion to the effect that the House of Delegates votes to have a Rural Health Activities Committee as one of our permanent Special Committees.

DR. SMALL: I so move, Mr. Chairman.

This motion was duly seconded and was carried.

CHAIRMAN AMES: At this time, Dr. Clyde Swett of Island Falls has a matter that he would like to talk about.

(Dr. Swett then outlined a plan for training Attendant Nurses which he has explained in an article entitled "One Answer to the Nursing Problem," appearing elsewhere in this issue of the JOURNAL. At his request his proposed plan and suggestion that one of the Officers of the Association, possibly the Executive Secretary, represent the Maine Medical Association on the State Planning Committee which is to take over the detail of legislation of this plan, were referred to the Reference Committee for study.)

CHAIRMAN AMES: We have one other matter to bring to your attention. Dr. Drake, will you bring before the House of Delegates a little more about the medical insurance plan. Then, the delegates can express their opinions.

DR. DRAKE: Mr. President, and members of the House of Delegates. I don't know that you need to have me read the report of the Committee for the Study of Prepaid Medical Care Plans and their recommendations to the Society of the adoption of a voluntary prepaid surgical and obstetrical plan. I know that you have all received copies of it, and have read it carefully.

To tell you briefly what the document contains, the Committee has gone through the possibilities of an insurance plan. There are three such possibilities:

1. Insurance of the Blue Shield type, which is sold and administered by our Associated Hospital Service;
2. An insurance plan set-up and administered by the doctors and hired experts in insurance;
3. An insurance plan, sold by commercial insurance companies.

As you know, we spent nearly a year in the existence of the Committee, in trying to arrive at some plan that could be formulated by our Blue Cross officials handling the insurance for us. We were unable to do so, for two or three reasons which I think you all understand.

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The next step was the introduction of a bill or an enabling act in the past session of the State Legislature, which was opposed by the State osteopathic society, and which was finally lost.

Then, the third form of such insurance which was available to us is the insurance marketed by commercial insurance carriers. This was investigated, and it is the investigation of this type of insurance which forms the basis of the report that the Committee brings before you.

We have had a great deal of help from the representatives of the insurance companies in the east, all of the insurance companies selling health and accident insurance, I think, in volume; the sizeable companies were represented at the meeting we held and the representatives they sent were certainly experts and they had made years of study of this particular type of insurance. They know a great many of the answers which we wanted and couldn't answer ourselves. We also received a good deal of help from Mr. John Farrell, the Executive Secretary of the Rhode Island Medical Society, whose name has been mentioned in this meeting this afternoon.

The most recent type of voluntary prepaid medical care plan which has been adopted is one in Rhode Island.

As one plan follows another, each plan has the advantage of errors that were found in the previous plan, and, therefore, each plan written should be a better one.

To state it briefly, this plan which the Committee proposes for your consideration, as the title says, is confined to surgical and obstetrical indemnities; that is because the commercial insurance companies do not feel that they have sufficient statistics to know what they should charge for house and office calls, and it is not an attempt, as was mentioned in my own county when this plan was considered, to try to keep the general practitioners out of the thing, but the insurance companies are hoping in a relatively short time to be able to give full medical coverage. However, at the present time, they don't know what premiums to charge for that, except that they would furnish us, if we chose, with medical sickness cared for in hospitals, at somewhat of an increase in premium, of course.

The insurance is aimed at individuals of the low income groups, and the income figures by the Committee decided upon were \$2,000 for a single individual for annual gross income, and \$3,000 for family income.

All doctors who are members of the State Society, if this plan were adopted, would be asked to sign the agreement to participate for one year, in the plan, under a fee schedule which would set a maximum amount, which would be allowed for a surgical operation of a certain type, and which would include the after-care for the patient. The insurance companies would be free to sell the insurance as the Blue Cross insurance is sold, in industry and in large manufacturing concerns, to any one who wishes to buy it, and the doctors who participate in the plan would not be expected to limit themselves to the fees in the fee schedule, if the insured individual in a given instance had an income above the prescribed income levels.

There are certain other minor things which are in the report of the Committee, and in the recommendations to the Association. There is one item where the insured be asked to sign an agreement when he was to be operated upon, for instance, saying that he would turn over the insurance indemnity from the insurance company to the physician, and our Executive Secretary tells us that that is entirely legal.

Also, the insured is expected, if he falls in the prescribed income limits, to be willing to accept semi-private hospital accommodations, unless in the opinion of the physician, private rooms or special nursing care or other things were made necessary by the nature of the illness.

That, in brief, is the plan. It also includes a fee for an assistant at surgical operations. It does not include a charge for anesthesia, and the reason that that was not included was that we construed the Blue Cross contract as covering anesthesia.

We have tried to see that this plan was explained and discussed by every county society which has held a meeting since we finally got the plan together, and in May, Dr. Cobb and Mr. Payson and I were in Rockland at the Knox County Society meeting, where we had been kindly invited, and Dr. Millington brought up the question about anesthesia. We had a short time to try to review that situation, and we have tried to do it, and I think we have the answers, although all of the data isn't in.

I tried to get, after that, from the Maine Hospital Association, a statement as to how many hospitals did not provide anesthetists, or did not furnish anesthesia to the surgical and obstetrical cases.

The Maine Hospital Association couldn't give me those figures, so I wrote, or Mr. Payson's office wrote to all of the hospitals in Maine, and at the present time, we have heard from 34 of them. At the same time, I conferred with Mr. Walter Black, the Assistant Director of the Associated Hospital Service in Maine, and yesterday I talked with him again, and Mr. Black tells me there are only three hospitals in Maine where they don't pay for anesthesia.

To some, perhaps, that may not be a big item.

I think, Mr. President, that I have described in brief, all of the important points that the Committee wishes to report, and I believe that you already have one of these documents, and because mine is marked up, I shall not turn it over to you. [Applause.]

CHAIRMAN AMES: Thank you, Dr. Drake. You have listened, now, to the report of the Chairman of the Committee to Study Prepaid Medical Care. Are there any questions you would like to ask at this time? (Discussion on file in Association office.)

CHAIRMAN AMES: It has been regularly moved and seconded that we refer this matter to the Reference Committee, for them to bring back a report to this House of Delegates tomorrow afternoon. All those who are in favor of the motion will please say "aye." Those opposed?

There was a chorus of "ayes" and the motion was carried.

CHAIRMAN AMES: Is there any other business to come before this meeting? If not, a motion is in order to adjourn.

DR. RICHARDS: I move that we adjourn.

This motion was duly seconded and was carried.

[Whereupon, the First Meeting of the House of Delegates was adjourned at six o'clock in the afternoon.]

(To be continued in the November issue.)

Ophthalmologist well trained, 36 years of age, completed a residency, wishes to work as associate with another ophthalmologist or E. E. N. T. man. Licensed in Maine. Working toward certification in ophthalmology.

N. KOPLOWICZ, M. D.

P. O. BOX 732

GENERAL POST OFFICE

NEW YORK CITY, N. Y.

SEVENTH NEW ENGLAND POSTGRADUATE ASSEMBLY

Sponsored by the Medical Societies of

MAINE, NEW HAMPSHIRE, VERMONT, MASSACHUSETTS, RHODE ISLAND AND CONNECTICUT

Copley Plaza Hotel, Boston

November 3, 4 and 5, 1948

GUEST SPEAKERS

DR. LOUIS K. DIAMOND
Assistant Professor of Pediatrics
Harvard Medical School
Boston, Mass.

DR. JOHN H. DINGLE
Professor of Preventive Medicine
Western Reserve University School
of Medicine
Cleveland, Ohio

DR. HARRIS ISBELL
Director of Research Division
U. S. Public Health Service Hospital
Lexington, Ky.

DR. ROBERT KENNEDY
Chairman, Fracture Committee of
American College of Surgeons
New York, N. Y.

DR. HAROLD M. MARVIN
Associate Professor of Medicine
Yale University School of Medicine
New Haven, Conn.

DR. G. GAVIN MILLER
Associate Professor of Surgery
McGill University
Montreal, Canada

DR. WALTER L. PALMER
Professor of Medicine
University of Chicago
Chicago, Illinois

DR. CORNELIUS P. RHOADS
Director, Memorial Hospital and
Sloan-Kettering Institute for Cancer Research
New York, N. Y.

DR. ALBERT D. RUEDEMANN
Professor of Ophthalmology
Wayne University School of Medicine
Detroit, Michigan

DR. EPHRAIM SHORR
Associate Professor of Medicine
Cornell University Medical College
New York, N. Y.

DR. WILLIAM D. STROUD
Professor of Cardiology
University of Pennsylvania Graduate
School of Medicine
Philadelphia, Pa.

DR. EDWARD G. WATERS
Assistant Clinical Professor of
Obstetrics and Gynecology
College of Physicians and Surgeons
Columbia University, New York, N. Y.

DR. CONRAD WESSELHOEFT
Clinical Professor of Infectious Diseases
Harvard School of Public Health
Boston, Mass.

PROGRAM

WEDNESDAY, NOVEMBER 3, 1948

MORNING SESSION

- 8.45 Registration
- 9.50 Assembly called to order by Dr. Leroy E. Parkins,
Chairman
- 10.00 Clinical Indications for the Use of the Newer Anal-
gesic Drugs With Notes on Their Addiction Liabili-
ties DR. HARRIS ISBELL
- 10.30 The Causes of Indigestion and Their Treatment
DR. WALTER L. PALMER
- 11.00 15-minute intermission
- 11.15 Newer Agents in the Treatment of Cancer
DR. CORNELIUS P. RHOADS
- 11.45 Management of the Complications of Peptic Ulcer:
Indications for Treatment DR. WALTER L. PALMER
- 12.15 Luncheon: Copley-Plaza Hotel
Subject to be announced DR. CORNELIUS P. RHOADS

AFTERNOON SESSION

- 2.00 Newer Chemotherapeutic Approaches to Virus Dis-
ease DR. JOHN H. DINGLE
- 2.30 Low Salt Regime and Other Measures in the Treat-
ment of Congestive Heart Failure
DR. HAROLD M. MARVIN
- 3.00 Newer Chemotherapeutic Approaches to Rickettsia
Diseases DR. JOHN H. DINGLE
- 3.30 15-minute intermission
- 3.45 Early Handling of the Severely Injured
DR. ROBERT KENNEDY
- 4.15 The Clinical Management of Acute Coronary Occlu-
sion DR. WILLIAM D. STROUD
- 4.45 Pitfalls in the Treatment of Fractures
DR. ROBERT KENNEDY

THURSDAY, NOVEMBER 4, 1948

MORNING SESSION

- 10.00 The Surgical Treatment of Gastric and Duodenal
Ulcer DR. G. GAVIN MILLER
- 10.30 The Use of Estrogens in Women
DR. EPHRAIM SHORR
- 11.00 15-minute intermission
- 11.15 The Recognition and Management of Intestinal Ob-
struction DR. G. GAVIN MILLER
- 11.45 The Use of Androgens in Women
DR. EPHRAIM SHORR
- 12.15 Luncheon: Copley Plaza Hotel
The Present Status of Tetanus Immunization
DR. CONRAD WESSELHOEFT

AFTERNOON SESSION

- 2.15 What the Rh Factor Is Not DR. LOUIS K. DIAMOND
- 2.45 Ophthalmology DR. ALBERT D. RUEDEMANN
- 3.15 15-minute intermission
- 3.30 The Management of the Potentially Infected Obstet-
rical Case DR. EDWARD G. WATERS
- 4.00 Ophthalmology DR. ALBERT D. RUEDEMANN
- 7.00 Dinner: Copley Plaza Hotel
Speaker and subject to be announced.

FRIDAY, NOVEMBER 5, 1948

Clinics will be conducted during the morning at various hospitals in metropolitan Boston. The time, location, con-
ductor and subject of each clinic will be announced.

An unusually interesting program will be presented. You are cordially invited to attend. Please mail applications early and reserve these dates.

The registration fee is \$2.00, and should be forwarded by mail, if possible. Dinner will be \$3.50, and the luncheons \$2.50 each. Members may invite guests to luncheon and dinner if reservations are made in advance.

Physicians so desiring may be left on call (KE 6-5600).

Application blanks will be mailed to all physicians in New England in early October. If you have not received one, please write the Executive Committee, New England Postgraduate Assembly, 8 Fenway, Boston 15.



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THE TRANSITION*

H. DANFORTH ROSS, M. D., Sanford, Maine

I thought it would be interesting for a few minutes this morning to review the changes that have taken place in the life of the general practitioner in the past 35 years. Turn the clock back one-third of a century and it seems a long time in retrospect, but with the young man this length of time will slip away quickly. He will wonder where it has gone, and he will marvel at how nimble the years have been and realize the blessings of a busy life spent in a service which is unexcelled.

Improvement in this era has been so marked that I dare say not a single physician starting in practice today realizes how fortunate he is to have the present day benefits which have accrued in the transition.

Not only the benefits of the results of research in medicine are his but other conditions make the work of the rural practitioner so much easier physically.

Having started practice in a typical country town 35 years ago, it is easy to recall vividly its advantages and disadvantages, together with the changes made by the march of time, and thereby perhaps interest the oldsters by recalling some of the things we had to do the hard way, and interest and encourage the youngsters by letting them see how much pleasanter their outlook is starting today.

If you were to ask me what one of the greatest changes over this period is, I believe I would surprise the younger men by saying that it is in transportation.

The practical car for that era when the best roads were poorer than the poorest today, was the open Ford runabout. It sold for the magnificent sum of \$375.00 new, but a dollar was a dollar then before it lost its reputation and retreated to its level of sixty cents.

The subject Transition seems well taken when you recall that Mr. Ford at that time made a supreme effort to induce people to buy new cars offering a refund of \$25.00 for each runabout and \$40.00 on each touring car if his sales reached 350,000 units that year. I can vouch for the ease with which one could be purchased, as a dealer who was almost a total stranger to me said, "Drive it away and pay as you can," without a dollar down, as he was so anxious to increase sales.

The roads in those days were like a corduroy bridge and your car was of the same vintage. It came without bumpers or spare tire. Starters were not known then, neither were there electric lights on them. You had a tank of calcium carbide to which you added water and applying a match you prayed it would light and burn until you arrived, not that you expected to see, but the two flickering torches waved in the darkness to warn pedestrians and insure you against the other fellow whose lights had already gone out as yours surely would do before you got home. Many the dark night have I seen the carbide die and borrowed a barn lantern to tie over the radiator to identify myself as a careful driver at night.

* Presented at the 94th Annual Session of the Maine Medical Association, June 1948.

Closed cars were almost unknown, and windshield wipers were not yet invented. You stuck your neck out around the windshield in stormy days and nights and let your face take it. Top speed for reckless driving was 35 miles per hour. You never wore the upholstery out because you were never on it very much.

You cranked your machine because there were no starters, and that added up to so much on a busy day that your arm always had a cranker's cramp or your biceps developed to where you looked deformed, but that would finally be taken care of as you would surely some day forget to retard the spark on the old model T and your arm would take a rest period in splints. Some husky driver would then accept the hazard of cranking and keeping her between the fences and then he was a chauffeur and demanded top wages for 24-hour service which was \$9.00 per week.

At this our young friends say alas, it has been a transition. A chauffeur full time for \$9.00 per week. Let us counter by reminding them that office calls were fifty cents each with some medicine furnished, and go four miles and make a call in any direction day or night for \$1.00.

It is hard to realize the change in conditions of transportation since those days we have just recalled, but before leaving the subject please remember that this was travelling deluxe, as crude as it sounds, for there were the winters and mud time in the fall and spring when the automobile was of little or no value and you reverted to the primitive method of locomotion by using the horse and buggy or sleigh, as roads so much of the time were impassable otherwise.

The care of the horse often entailed more work and perseverance than the care of the patients. You were constantly slowed down to a snail's pace because snow removal was almost nil, and with mud time on both ends of the winter you had already just left or were facing a bottle neck.

With a horse and bad travelling, if you received four calls, for instance, which were six miles away in different directions, you had 48 miles to cover for the day.

The price was one dollar for the first 4 miles and 25 cents a mile for two more makes \$1.50 a call, and four calls would gross \$6.00.

Now it was not uncommon to have one of these an obstetric case, and you were not travelling back and forth to make frequent examinations. You stayed on the job and often it would be 12 to 24 hours before you returned home.

Nowadays with a hospital within 20 miles of the case, or a good nursing home, a nurse well trained

can administer the pre-delivery medication, and many times the only time you are really disturbed is when a sweet voice over the phone says, "We are ready for you in the delivery room."

The change in transportation can only be realized by those who were forced to face conditions then and watch the transition which has brought good roads, snow removal, comfortable cars and clear sailing for the greater part of the year.

Time will not permit the real description of labor, inconvenience, exposure to the elements and loss of time which were inflicted on the general practitioner before modern methods and machines came to his rescue. Only those who practiced under those conditions and have witnessed the transition can give it true evaluation.

Unfortunately no one can truly appreciate an improved condition except someone who was forced to persevere and do it when it was ten times as hard. Perhaps I am digressing too far from the subject of the real practice of medicine, but I have endeavored to impress the uninitiated with the fact that in the old days you not only had your practice to take care of but most of the time it took a good man to just get where it was.

Another change which has been very marked and beneficial is the attitude of the patient through education. Proper information has been put into the hands of the people, which has changed public opinion regarding many things medical and surgical.

In the old days the diagnosis of an acute belly was only the beginning of your worries. In at least six to eight cases out of ten you were obliged to use the best of sales talk with much arguing and persuasion to convince the patient, and always the people, that operation at first was necessary and secondly was safer than not operating. They often delayed so long that risk was increased to the point of embarrassing the doctor and perhaps fatal to themselves.

People have become operation, treatment and hospital minded through better knowledge of our work, until you not infrequently receive a call where they have made a shrewd observation that they have an acute appendix and almost without fail accept the doctor's decision with no question.

Removal of these barriers is no small part of the transition over a period of years which serves to make the life of the present day practitioner less perplexing.

While time has played into the hands of the beginner of today through education of the public, improvement in roads and automobiles and the many services at his command nowadays to ease the strain

physically, he finds that research has also come to his rescue.

How well we remember the cases of pneumonia, septicaemia and meningitis in which we felt our abject helplessness, where any treatment we could initiate was probably of no more help than as though we had stayed at home.

So many times a patient withstood the sepsis and managed to live through the ordeal only to find himself left an invalid by a heart muscle incapacitated for the rest of his life.

How many we have seen go out without a fighting chance where if we had had access to the sulfa drugs, penicillin and streptomycin which have been ushered in during this transition period, we could have performed miracles.

Imagine if you please your grip packed 35 years ago. It would have no insulin, liver extract, vitamins, internal secretory extracts as stilbestrol and many others, the sulphur drugs, penicillin, streptomycin, and so on.

Take time to enumerate the diseases and conditions for which these furnish a specific weapon, and you were then deprived of these, and you wonder what you really had for an efficient armament at hand in the old days.

In the hospital, oxygen tents, electrical appliances, new and safe anesthetics, and auxiliaries so many and varied that space will not permit mention, have made their valuable contributions.

Yes, it has been a marvelous change and all for the better. Better sanitation in way of chlorination of water supplies has made typhoid an unusual case. Prophylaxis among children has made diphtheria an occasional disease. Insulin offers a specific in diabetes and its complications. The sulfa drugs, streptomycin and penicillin have changed the whole picture regarding the doctor's equipment for combating infections. Yes, it has been a transition spelled with capital letters. What changes the next three and a half decades will witness will be most interesting, as science and research move on with their gathered momentum.

Young men, you have chosen the most wonderful profession in the world, at the most wonderful time. Will there be anything in our profession a few decades hence which has not been changed so much that no semblance of the family doctor will be left, as we have seen him? It would seem that way.

However, I am so jealous of that expression "family doctor," that I would like to offer a few words in rebuttal. There are a few things about his kind of service, if he is a true type, which when properly administered go beyond giving pills and writing prescriptions. If through his years of experience he has

developed to where he fills the proper place in a community, he realizes there is something about his work that will see no transition.

He knows that as long as there are people, that human nature will never change and will vary only as there are different stratas of education. He knows that as long as there are people there will be sickness and disaster.

From time immemorial there has been and will be the psychological side of people which must be treated with ingenuity and understanding and not by any tangible thing which science and research can produce.

There are a few people always known to the profession who like to shop around and change through curiosity or hope for help that no one has ever been able to give, but generally they like to have a family doctor upon whom they can depend in time of trouble and sickness. He is the one who ushers their children into the world and cares for them as they grow up. He is consulted so frequently and on so many different problems that their perplexities become his and he finds himself unwittingly a member of their team. When they enjoy prosperity and health, it is a source of satisfaction; when misfortune, sickness and death visit them, he has a deeper interest than his medicine alone, as he finds his sympathy going out to them as he has become interested in their personal happiness.

This is not that he is one bit better than the next man, but from the nature of his work he is in contact with people in time of suffering, sorrow and distress. He often sees the last ray of hope crushed out of their souls, and he is on the spot. It naturally arouses his sympathy and he gives to the limit of that thing which alone justifies our existence — Service.

These are times when friendships are welded. The family doctor slides into a niche peculiar to his profession. He has a certain pride in the fact that he is so much accepted into their confidence and has become so indispensable that he can render a service which no one else can fulfill; a service of friendship, encouragement, sympathy and understanding at which the real artist of the profession becomes a past master.

No — as long as there are human woes, sorrow, sickness, death and broken hearts, the family doctor will hold a position in the hearts of people, encroached upon by no one, and each community will hold in esteem one who can supply the kind of relief that they never can put up in capsules.

These human problems and the need of assistance from the family doctor will never be outmoded.

They will never know transition.

THE FUNCTION OF THE TUBERCULOSIS WARD IN THE CENTRAL MAINE GENERAL HOSPITAL*

By LESTER ADAMS, M. D., Western Maine Sanatorium, Greenwood Mt., Maine

The Central Maine General Hospital has had a tuberculosis ward for 15 years. Most of the patients received have been transferred from the Western Maine Sanatorium. From the point of view of the sanatorium and the welfare of the patients there this arrangement has proved of so much value that an attempt to define and appraise it seems desirable.

This hospital was opened in 1891, 6 years after the State Board of Health was organized. Although the discovery of the tubercle bacillus had been announced 9 years earlier, examination of sputum for diagnosis was by no means widely practiced¹ and the State Laboratory of Hygiene was not to be opened for 13 years. Two years earlier, in 1889, the Maine Board of Health had published and circulated widely its pioneer Circular 54, emphasizing that the disease was infectious, and that fresh air was of great value in prevention and treatment. In 1892, vital statistics were first published, showing a death rate in the state of 227 in contrast to the 24 per 100,000 in 1946. In 1895, tuberculosis was made reportable. In the 1898-9 report of the Board of Health the need of a sanatorium in Maine was emphasized, and in 1901 the Maine State Sanatorium Association was formed, resulting in the opening of the sanatorium at Hebron in 1904.

In selecting the site for the sanatorium emphasis was placed on the value of fresh air, which at the time meant a hill top outside a city. While there have been criticisms of the location because of difficulty of access there is much to commend the location and the general organization and equipment of the sanatorium. Sanatorium patients welcome the transfer to the hospital when it is necessary, but are content to return to the sanatorium for the necessary period of bedrest. The location has been fortunate in being only 16 miles from this hospital, and the sanatorium fortunate that the hospital has developed so as to furnish high grade service.

Previous to 1932 an occasional patient at the sanatorium needed the service of a general hospital. The hospital took the patient with acute appendicitis, for instance, placing the patient in a private room with infectious precautions. This service was given in a fine spirit of coöperation for the most part, although there were occasional tuberculous patients who could obtain admission to general hospitals only under protest from the hospitals. Because the disease is in-

fectious general hospitals felt that it should be treated in sanatoriums which were created especially for the purpose. Also the patient with tuberculosis requires usually a long period of bedrest and is likely to exhaust his funds before the period of hospitalization is completed.

So it may be asked how the presence of tuberculosis patients in general hospitals is explained. The National Tuberculosis Association in 1916 urged that general hospitals devote beds to tuberculosis. The reasoning used then seems pertinent now. Under the title "The Separation of Tuberculosis from General Medicine" the author² stated:

" . . . that some separation has taken place is useless to deny. That this has been an advantage to either side no one would claim, for both are losers. . . . It is a curious phenomenon and one for which it is not easy to give adequate reasons. It may be suggested that we have inherited an idea of a certain element of fatalism in our attitude to tuberculosis. Possibly the fact that it is often not recognized until the disease is far advanced may have some influence. No one wishes to fight a losing battle and the death rate shows that too often it proves to be this. How much interest is taken in a patient with pulmonary tuberculosis who goes to a general medical dispensary clinic or applies to a general hospital for admission? There may be some exceptions but as a rule the effort will be made to send him somewhere else in the case of the dispensary and in the case of the hospital he will not be admitted. Should he have some unusual condition, say a tuberculous pericarditis or peritonitis, the result will be very different. But you may say the patient with pulmonary tuberculosis is not welcomed because he is a danger, or his condition presents no specific interest or he has a chronic condition which we cannot remedy. Does not this prove the truth of my title whatever the reason may be? Under proper conditions he is no more a danger than the patient with typhoid fever; as to interest that is largely a question of those who are in attendance, and as to its being a chronic condition have we not many such constantly in our wards? Of course there are many diseases which we cannot remedy but we can at least do something to alleviate. We do not of necessity refuse such and close our wards to them."

He said, "It would be of great advantage to general medicine and tuberculosis if every general hospital had a department for tuberculosis."

* Presented at the Clinical Session of the Maine Medical Association at Lewiston, Nov. 10, 1947.

Another author pointed out that tuberculosis is a chronic disease of many years duration, that frequently an individual may carry on work of considerable usefulness in spite of it and be subject to intercurrent ailments.

He wrote, "It is a hardship to the public that such patients cannot as a rule be admitted to general hospitals and it is painfully true that there are few hospitals to which they can be admitted at all, and fewer of these which afford opportunity for proper study and investigation by thoroughly trained men. There is no field in which the general hospital can do a greater or more valuable work than in the temporary care of patients with chronic pulmonary tuberculosis.

Sanatoria for the treatment of early pulmonary tuberculosis are unquestionably of great value, and hospitals for the treatment of chronic, more advanced cases are necessary, but in order that, in such hospitals, the patients should have the best treatment and the students the best opportunity for study, it is desirable that these institutions should be departments of or closely affiliated with general hospitals."

In 1921, the American Medical Association and the American Hospital Association made recommendations similar to those of the National Tuberculosis Association.

This movement appears to have succeeded for we read⁴ that "as a result in 1934 more than 40,000 consumptives were treated in general hospitals" and by 1942 there were in the United States 80% of the tuberculosis beds in sanatoria and 20% in general hospitals, while in Maine 94% were in sanatoria and 6% in general hospitals.⁵ Of the general hospitals in the United States taking tuberculosis 24% were semi-private hospitals. Besides this hospital there was no other semi-private hospital in Maine making special provision for tuberculosis, and only one other in New England.**

Although the chief function of the ward in this hospital is now thoracic surgery, the inception was apparently due to a need for more beds. In 1932, which was during an economic depression, there was a long waiting list for Maine Sanatoria, and there were vacant beds in hospitals. The alternatives were to build a new sanatorium building or to utilize beds in general hospitals. The latter course was followed, and this hospital took 16 patients, giving one floor to the work. The patients were ambulatory, with negative sputum, with the prospect of being discharged home in a few weeks or months. In 1934, with a continuing need, an additional 15 beds were utilized, and surgery was begun, making it necessary to take

positive sputum cases. Later the beds were reduced to 10 and remain at that figure. The state has paid the hospital for the use of the beds.

In 1932, the year this service was inaugurated, there appeared an article "The Changing Status of the Sanatorium"⁶ which mentioned the construction of a unit of 100 beds on the University of Michigan Hospital for tuberculosis, and a second,⁷ a very strong argument for using general hospitals in the treatment of tuberculosis, described the work done in Duluth and St. Paul.

About 25 years ago when thoracic surgery began to cure otherwise incurable tuberculosis, the rural sanatorium, of which the one at Hebron is an example, had to find a way to get the services of a thoracic surgeon. Patients selected at Hebron were described in clinical reports mailed to the surgeon, X-rays were sent for study, and if the surgeon approved, the patient was sent to Montreal, Boston, then in 1931 to Fairfield when the surgical building was opened. Such an arrangement would be possible today, but it has obvious disadvantages because the sanatorium staff does not have close contact with patient or surgeon before, during and immediately following operation as is desirable; consultations by mail are apt to be time consuming and unsatisfactory; also considerable travel is necessary on the part of patients who may be very sick.

In 1934, surgical treatment was begun at the Central Maine General Hospital. Patients have been selected from those at Hebron, discussed here at conference with the surgeons, and following operation sent back to the sanatorium. Because of the proximity of the two institutions and the welcome given by the hospital to the Sanatorium Staff it is possible for the latter to have close contact during the patients' stay here, to transport the patients with their personal belongings, charts, X-rays, also to anticipate vacancies and transfers. Back to the sanatorium with the patient go notes on the hospital stay.

During the course of the development there have been times when the wisdom of the arrangement has been questioned, largely on the grounds of danger to hospital personnel. For a time pupil nurses were employed on the wards. Nurses have been found to develop the disease, so the use of pupil nurses has been discontinued for several years, and the hospital has depended for nurses training in tuberculosis on an affiliated hospital. With the employment of older nurses there is less danger from infection. Various studies elsewhere of this problem of danger to nurses have led to the conclusion that as many nurses are infected in the general wards from the unrecognized cases of tuberculosis as in the tuberculosis wards. It has been of much interest to observe in talking with house officers and nurses in this institution that

**The Rumford Community Hospital also made special provision for tuberculosis for a limited time beginning in 1932.

many hold the opinion that the danger is greater in the general wards than in the tuberculosis wards. It is a satisfaction that the hospital has the prospect of a photo-fluorographic unit with which all admissions and hospital employees can be X-rayed, resulting in the discovery of tuberculosis as well as non-tuberculous chest conditions.

During the 15 years house officers have shown varying degrees of interest in the tuberculosis service. One became successively resident at the sanatorium, resident at the hospital, and assistant superintendent at the sanatorium, covering a period of more than 5 years; a second spent 3 months at the sanatorium preparatory to entering general practice. Not infrequently other services in the hospital discuss cases with the tuberculosis service at the weekly conference, and a variety of conditions are discussed as pneumonias, tumors, cysts, bronchiectasis, in differential diagnosis. When bronchoscopies are done there are usually in the group both tuberculous and non-tuberculous cases.

It is to be noted that the affiliation of the sanatorium and hospital makes a sanatorium appointment definitely more attractive to young physicians than it would be otherwise.

Two rooms in the ward are reserved by the hospital for tuberculous cases waiting to go to the sanatorium, or private patients in the hospital for diagnosis or treatment. These beds may serve the occasional tuberculous patient needing institutional treatment who will consent to enter a general hospital but will refuse to go to a sanatorium, because of distance from home or other reason. Elsewhere general hospitals have taken hopelessly sick patients but this use has not been made of these beds, in fact, efforts have been made to transfer hopeless cases from the hospital to the sanatorium. Because of unavoidable delay in getting patients admitted to a sanatorium these beds may serve patients having emergency conditions as hemoptysis or spontaneous pneumothorax.

While thoracic surgery ranks first among the services performed there are also cases for the roentgenologist, orthopedist, the urologist, obstetrician,

cardiologist, internist, ophthalmologist, dental surgeon, etc. Help is also received from the social worker. Several members of the hospital staff, although their chief interest is not tuberculosis,⁴ have contributed generously of their skill and time. Obviously all of that service cannot be given by the resident staff in an isolated sanatorium, nor can an isolated sanatorium reasonably expect a consulting staff to carry this work to it. The arrangement succeeds in getting for sick people the advantages of the city hospital. It appears that patients expect and demand more now than formerly.

SUMMARY

With the establishment of sanatoria tuberculosis was separated from general medicine, but tuberculosis patients have intercurrent illnesses needing diagnosis and treatment such as is offered only in a general hospital. Twenty-five percent of tuberculosis beds in the United States are in general hospitals. Thoracic surgery requires specialized service such as is difficult to supply in an isolated rural sanatorium. This hospital during 15 years has taken tuberculosis patients, largely from the Western Maine Sanatorium, and given the service not easily available in the latter institution. The arrangement has proved of such great value that it should be continued.

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Seventy per cent of all new cases discovered by mass X-ray survey are minimal and do not constitute a grievous public health problem. Most of those cases will be noninfectious; the disease process will be incipient; and the probability of serious progression, with adequate follow-up, will be slight. Such cases can be cared for by private physicians and pub-

lic clinics, assisted by public health nurses and medical social workers. Sanatorium beds now occupied by noninfectious cases can be given over to far-advanced virulent disease which constitutes a menace to the local population.—Francis J. Weber, M. D., Ohio Pub. Health, Feb., 1948.

RECENT ADVANCES IN ELECTRO-SHOCK THERAPY

MAX E. WITTE, M. D., Portland, Maine

Electro-Shock Therapy is a system of treatment of depressions by passing an electrical current through the brain producing unconsciousness and a convulsion. The patient lies down on a wooden table and two metal discs, which act as electrodes, are fastened to the region of the temples by a wider rubber band and connected with the machine. The current used is an alternating current obtained from an electric light socket. The treatment consists of the application of 100 to 200 volts for 0.2 to 0.5 seconds. A sandbag is placed under the patient's lumbodorsal region and a pillow under the knees; a mouth gag is inserted and the operator holds the patient's lower jaw up to prevent a dislocation and three attendants lightly hold the patient's arms and legs to prevent excessive movements and thus lessen the danger of fractures. When the switch is snapped, the patient immediately becomes unconscious and in a few seconds has a convulsion which is similar to an epileptic convulsion. The start is a sudden flexion of the body accompanied usually by a cry. This is followed at once by the tonic phase, which lasts eight to ten seconds, during which time the patient's body is rigidly extended. Then the clonic phase, which lasts about 30 seconds, starts with jerking contractions of the extremities and dorsiflexion. Following the seizure, the patient remains unconscious for 10 to 30 minutes and this is followed by a short period of confusion. In some cases, the convulsion is followed by a period of apnoea which lasts from 60 to 90 seconds.

The above is the standard procedure. There are two other methods of electro-shock therapy which should be briefly mentioned. The use of a unidirectional pulsating current instead of an alternating current, with one electrode placed on the temple and one on the vertex of the skull, is followed by less memory difficulty and less confusion but the patient is more apprehensive. The second method is the electro-narcosis treatment which consists of an electrically produced grand mal seizure, followed by an electrically maintained unconscious state. This method apparently produces no better results except possibly in cases of paranoid schizophrenia.

Having briefly described the standard procedure, the writer will now answer the following questions in the light of recent knowledge. (1) How safe is the procedure? (2) Is permanent brain damage produced? (3) What are the contra-indications? (4) Should it be used as an out-patient treatment? (5) What cases should be treated with electro-shock? and (6) How does electro-shock work?

In regard to the first question, "How safe is elec-

tro-shock therapy?" Kalinowsky¹ reported 2,000 cases without a fatality. The mortality rate has been given from 0.06 to 0.8 percent. Moore² reported 1,596 intramural and 585 extramural patients treated at the Philadelphia Psychiatric Hospital from November 4, 1940, to May 5, 1946, a total of 2,181 patients, 20,647 convulsions or an average of 9.5 treatments per patient and only two deaths. Dr. W. J. Otts³ of New Orleans reported 27,000 treatments and no fatalities.

Whether or not electro-shock therapy produces permanent brain damage is still not definitely decided, but the majority of evidence points to the fact that it does not. Cobb¹⁸ states that in the laboratories of ten different workers, animals have been given convulsive shocks and the brains afterwards examined. Five reported cerebral lesions and five said there were no lesions. Bernard Alpers^{4, 5} stated that petechial hemorrhages have been reported in experimental animals, but these are probably the result of the use of greater dosage and intensity of current than would be used in man. In other experiments in dogs, cats, and monkeys, in which a greater effort was made to simulate the therapeutic conditions, the impression is that the nerve changes, if any, are functional and confined to the path of the current. These changes usually consist of scattered cell losses and alterations of a reversible nature in the nerve cells and myelin sheaths. Autopsies in only a few human cases, following death from electro-shock, have been reported and usually some extraneous factor has entered in, such as advanced age, which has introduced doubt whether the recorded cell changes are due to electrical shocks or to unrelated vascular disease; or there may have been cardiac complications which introduce the element of anoxemia as an explanation for brain damage; or there may be a long period between the termination of the shock treatment and the death of the patient; or there may be a complication of syphilis of the brain.

Alpers feels that experience has amply shown that electro-shock properly administered is not the cause of death by brain damage, and that when death occurs, it is usually the result of cardio-vascular disease. The possibility of permanent brain damage is present in two situations: (1) a large number of treatments, even in young and healthy subjects, and (2) the presence of pre-existing brain damage or disease. Alpers cites the case of a lawyer who had 50 electro-shock treatments and suffered what apparently was a permanent memory impairment.

The contra-indications to electro-shock therapy are

fewer than in the earlier years of the treatment. Moore,² among his hospital patients, had 39 over 60 years of age, 15 over 65, 2 over 70, and his oldest patient was 74. Eighteen patients had arteriosclerosis and 190 had hypertension. There were 238 patients with heart disorders, consisting of myocardial disease in its various forms. There was only one death due to heart disease and that was in a 52-year-old patient with severe myocardia infarctions due to disease of the coronary arteries. The patient also had diabetes mellitus. Substernal pain developed after the third electro-shock and an E.K.G. showed a fresh infarction and the patient died suddenly four weeks later. Moore concluded that patients with heart disease ordinarily tolerate convulsions well, providing the disease is not too acute or too severe. Thirty of Moore's patient's also had at the time of treatment or in their past history, T. B. or some other pulmonary disease, which would have previously prohibited electro-shock therapy. Moore also treated patients with organic disease of the central nervous system, spinal curvature, and osteo-arthritis. Moore did not use curare because he thought it introduced an increased hazard. (Psychiatrists are equally divided against and for the advisability of using curare.)

Moore concluded that the former arbitrary and rigid contra-indications to electro-shock therapy should be relaxed, so that many more persons may be benefited by this form of treatment. However, he cautioned that there should be no relaxation in the exercise of proper precautions in the selection of patients for treatment, the choice being determined by the over-all physical status of the patient, the severity of the presenting psychosis, the urgency for treatment, and the promise of a favorable result.

In the discussion of Moore's paper, Rodas stated he had treated patients with moderately advanced congestive heart failure, several with auricular fibrillation and advanced myocardial degeneration. Dr. A. E. Bennette said that the only absolute contra-indications in his experience have been decompensated cardiac disease, suppurative pulmonary disease, and generalized bacteremic infections.

Several other workers have treated elderly patients. Feldman, et al⁶ reported the electro-shock treatment of 53 patients over 65 years of age. (Thirty-six were cases of depression, four were manic, seven anxiety psychoneurosis with depression, and six paranoid psychoses.) Eighty-three and five-tenths percent showed varying grades of cardiovascular defect, ranging from uncomplicated hypertension to active heart failure, including pulmonary edema and auricular fibrillation. There was no evidence of progression of the heart disease as a complication of the therapy. There were no serious complications from the treatment, except in the case of

a patient with congestive heart failure and artificial respiration was necessary on some occasions.

Wilbur and Fortes⁷ treated 30 patients all past 70 years of age and concluded that electro-shock therapy is well tolerated by the aged. Gallinek⁸ treated 18 cases from 60 to 84 years of age, and half of these cases maintained full recovery or marked improvement for at least 18 months. Although most of the cases presented cardiovascular or other somatic pathology, complications occurred in only two cases. Broggi⁹ reported that he successfully treated a man of 65, with a blood pressure of 220-130.

It would appear that the contra-indications against electro-shock therapy are much less than formerly supposed. The psychiatrist is liable to be faced with the same decision as the surgeon with a patient who is a poor risk and yet who urgently needs an operation. For instance, the psychiatrist may have an acutely agitated depression in the involutional period in a woman with a severe heart disease. The patient is not eating or sleeping and is surely but steadily wearing herself out, and, if nothing is done, the chances are that she will die. With electro-shock therapy she can be quieted and will eat and sleep and a recovery obtained in most cases, and the chance of a fatality from the treatment is worth taking. However, all precautions should be taken. Every patient should have an electro-cardiogram and an X-ray of the dorsal spine before treatment is started. The relatives should be informed of the dangers of the treatment and permission to give the treatment should be signed by the nearest relative and witnessed. However, lest we become too optimistic about the dangers of this form of treatment, the writer would like to quote from a recent report of the Group for the Advancement of Psychiatry¹⁰ that "the complications and hazards of the use of electro-shock therapy should be re-emphasized, since they appear to have been minimized by some workers."

The writer agrees with a great many of the other workers, that electro-shock therapy can be given in certain cases on an out-patient basis. Stockfish¹¹ treated 65 cases as out-patients with 33 complete remissions, 18 improved, and 14 failures. Kerman¹² gave office treatments to 242 cases and only 15, or 6 percent, required later hospitalization. In Salt Lake City, where mental hospitals were scarce, ambulatory electro-shock therapy was a boon to patients, and Moench¹³ gave ambulatory treatment to 23 patients, aged 26 to 73. Eighteen completed treatments and 15 were cured or markedly improved. Feldman, et al¹⁴ reported that the Albany Hospital, where 5,000 electro-shock treatments were given annually, 3,000 were given on an out-patient basis. Fetterman¹⁵ found that half of the patients could be treated on an ambulatory basis.

In out-patient treatment, the patient must be ac-

accompanied by a relative, friend, or attendant besides the person who drives the car, as there is occasionally a confused period after the treatment. The patient should take no food before the treatment. The treatment is given in the usual manner and after the treatment, the patient returns home. It is important that the depressed patient be watched carefully to prevent suicide, but after the first two or three treatments this tendency is lessened. However, it should be noted that it may be increased after the first treatment. However, there are many advantages to outpatient treatment, such as saving of money, and the prestige of the patient. It also encourages the patient more to keep him in his normal environment and routine.

There has been no marked change in the type of patients that should receive electro-shock therapy. The Group for the Advancement of Psychiatry, Report I, Shock Therapy,¹⁰ summarizes our present knowledge by stating:

"The preponderant weight of the evidence, points to the conclusion, that the electro-shock therapy materially shortens the majority of depressive episodes, especially those which occur in the involutional period. It may or may not aid in shortening or controlling individual manic episodes. No evidence has been found to indicate that it has any effect in altering the cycle of a manic-depressive psychosis.

"The evidence is conflicting as to its efficacy in the schizophrenias. Good results have been reported in some cases of severe catatonic and acute paranoid reactions, but these conditions may respond also to appropriate psychotherapy and good hospital care. Any improvement that occurs appears to be due to modification of the affective components. The schizophrenic personality is not altered by electro-shock therapy.

"The preponderance of evidence indicates that the use of electro-shock therapy is contraindicated in the psychoneuroses with the possible exception of severe, resistant neurotic depressions, in which symptomatic relief may at times be obtained."

The Committee on Therapy of the Group for the Advancement of Psychiatry, in their report on Shock Therapy,¹⁰ state there is as yet no adequate theory of the mode of action of electro-shock therapy and all indications are that it operates on a symptomatic rather than on an etiological level.

However, it may be interesting to speculate on the various theories.

Sands¹⁶ states: "Regarding the whole problem of the mode of action, it is difficult to escape the conclusion that a varying degree of personality disintegration and regression is required, sufficient to dis-

organize the recently acquired habits of feeling and thinking."

The writer feels that whatever the *modus operandi* is for electro-shock therapy, the same factors will explain the results of insulin and metrazol therapy. The theory must also explain the peculiar fact that psychiatrists have known for years, namely that frequently following a severe infectious disease, the mental condition of a psychotic patient improves. In 1920, the writer helped in a typhoid fever epidemic in a state hospital and many of the patients who had the disease improved and those who had depressions became well enough to go home. There was one suicidal and homicidal catatonic praecox who had a severe attack of typhoid fever. The writer put this man, who had a temperature of over 105° in a tub of ice water, as was the usual treatment at that time. This man had Chenes-Stokes respirations and the writer did not expect to get him out of the tub alive and so informed his relatives. However, he survived the treatment and the disease. For several months after his recovery from typhoid fever, this patient's mental condition was much improved but not sufficient for him to leave the hospital, but then he gradually lapsed back into his previous mental condition. The writer has also heard of a very excited manic who jumped over a fence, broke his leg, and promptly recovered from his excitement.

In discussing the theories of electro-shock therapy, it must be remembered we have two unknowns: we can't know the cause of the disease cured, nor how the treatment effects a cure.

In considering the theories that claim that electro-shock acts in an organic or physiological manner, we have first the so-called "switch board" theories. Sakel explained the results of insulin coma therapy by the fact that the injured nerve cells recuperated during the artificial rest and the normal nerve pathways were then able to dominate. A variation of this theory states that a psychosis is due to the development of new and pathological traits with the opening of abnormal nerve pathways and the electro-shock therapy puts these pathways out of commission, but how is not known. This theory has the support of the biological law that the last acquired faculty is the first to be lost. Then, Meduna, who introduced the first convulsive therapy, namely metrazol, worked on the theory that epilepsy and schizophrenia were antagonistic to each other. This theory was based on a false premise, because catatonic schizophrenics have seizures, which have been called a praecox seizures, and they are rarely followed by improvement. Neither does this theory explain why the convulsive therapies work best in the effective disorders.

There is a reduction of the amount of sugar in the nerve cell, which is produced slowly in the hypo-

glycemic coma and quickly in metrazol and electro-shock. This reduces the metabolism of the cell and also produces an anoxemia or the cell is only able to use oxygen in the presence of glucose. An anoxemia is also produced in electro-shock by a vasoconstriction which the convulsions produce. It is possible that the nerve cells may rest during the period of anoxemia or may be stimulated to more normal activity during the period of increased metabolism that follows the anoxemia. Again it is very possible that the thalamus, which certainly has something to do with the emotions, is stimulated in some manner during the electro-shock, and Ewald talks about "massage of the diencephalic areas."¹ Other workers have thought that the convulsions depressed the activities of the cortex. Gelhorn believes that the sympathetic adrenal system, which dominates the vago-insulin system in the normal person, is stimulated. Stief thought that hypoglycemic coma and convulsions produced spasms in the brain capillaries, which eliminated diseased nerve cells, but no diseased nerve cells have been found in or proven to be the cause of the psychoses helped by electro-shock, metrazol, or insulin coma.

The psychological theories are equally numerous and interesting. Some workers believe that the patient undergoes the experience of impending death followed by the feeling of rebirth and that the sensation is so great that it does away with regressions and narcissism. Others feel that the threat of death mobilizes all the vital instincts of the patient who reappraises and accepts reality in his efforts to overcome the threat. Others believe that fear is the therapeutic factor but do not go as far as to imply a death threat. Fear, however, occurs in only a few patients taking electro-shock and these patients do not necessarily get well. For instance, the neurotics who show the most fear have the poorest results with electro-shock therapy. Some workers feel that the electric shock satisfies the guilt feeling of the patient and is desired because it is felt that it is a fitting punishment acceptable from the hands of a trusted and kind doctor-father who really does not wish to injure the patient. Masse¹⁷ feels that the electro-shock strengthens the ego and liberates it from pathological regressions. Psychoses show more spectacular improvement with electro-shock than psychoneuroses because the accumulated guilt is more deeply experienced. A marked increase in potency can be found after most shock treatments due to a relief of the guilt feelings by punishment. (The line forms to the right.) The success of the electro-shock treatment is essentially due to the battering down of the defense mechanisms, which is the defense of the ego to the conflict between the id and the super-ego.

If electro-shock works by a psychogenic mechanism, one would expect that it would be necessary

to use psychotherapy along with the electro-shock and yet this does not seem to be the case. Although psychotherapy is something that is difficult to evaluate both as to amount and type, yet the psychiatrists who do not use psychotherapy with electro-shock seem to get as good results as the ones who do. The writer has always thought that it was very important to use psychotherapy along with electro-shock. However, recently he treated a 20-year-old French girl, who had a depression, with indifference but no agitation, retardations, or delusions or hallucinations, for five months and because of this had to give up her training to become a nun. This girl could understand and speak very little English and the writer could not talk French and so psychotherapy was impossible. Yet this girl recovered with ten electro-shock treatments.

SUMMARY

(1) Electro-shock therapy is a fairly safe procedure.

(2) It is contra-indicated in decompensated heart disease, suppurative disease of the lungs, and general bacteremic infection.

(3) It is most efficacious in depressions.

(4) It can be given in many cases as an outpatient treatment.

(5) How electro-shock produces results is not definitely known but there are many interesting theories.

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DETECTION CLINICS AND CANCER ORGANIZATION*

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During the last two or three years many county medical societies have been asked by representatives of the American Cancer Society or by members of "The Field Army" to sanction the formation of so-called Detection Clinics or Health Maintenance Clinics in the various hospitals throughout their counties. The representatives carefully explain that these clinics are being established primarily for the examination of well people with the idea of finding precancerous conditions, early cancers, and any other incipient diseases that may be present, and if disease is found the patients will be sent to their own doctors for treatment. These representatives also explain that the American College of Surgeons and the American Medical Association have endorsed the principles of the clinics, but have stipulated that the permission of the county medical societies must be obtained before the various hospitals of the county are to be approached. Some county medical societies have unhesitatingly given their permission, but others have withheld their sanction until further study. They want to know the need for these clinics. They want to know more about the organizations sponsoring the clinics, i.e. The American Cancer Society and the Field Army. They want to know the real reason for starting the clinics, who is going to control and pay for them, and how they are going to fit into the practice of medicine. This paper is written to supply some of these answers.

THE AMERICAN CANCER SOCIETY was originally formed in 1914 by a group of physicians who came together and called their organization "The American Society for the Control of Cancer." The name was later changed to The American Cancer Society. The society elected officers and stipulated that the society should be a self-perpetuating one, new members being voted in by a majority vote of the members. The society met from time to time to consider the cancer problem as a whole and the ways and means by which its ravages might be curbed. In early 1914 it advocated that public health departments should take active interest in cancer control. By 1928, it was sending out medical field representatives to make contact with state and county medical societies and to encourage them to establish cancer committees. Today they have succeeded in establishing state divisions of the American Cancer Society in all the states. One of the contributions of the American Cancer Society towards the control of cancer was the proposal that the individual cancer case can best be handled by groups of physicians in-

cluding surgeons, radiologists, pathologists, and other specialists. They pointed out that no one physician could hope to have in his mind all the necessary knowledge that such a group could bring to the consideration of the case. Having this thought in mind, they conceived the idea that tumor clinics and tumor conferences should be established in every hospital throughout the United States and Canada. The tumor clinics were to function simply as diagnostic clinics, but the tumor conferences were to act as a forum where all aspects of the cancer cases in question could be discussed by the various departments of the hospital, and where the proper treatment for the case in question would be recommended.

At this time, about 1930, the American Cancer Society did not have the funds with which to carry out its recommendations, nor did it have an executive branch that could do their will. Furthermore, it believed that the cancer problem was essentially a surgical problem and rightly suggested that the American College of Surgeons was the logical organization to implement the formation of clinics and conferences. The American College of Surgeons was agreeable to the proposition and immediately acted upon the request of the American Cancer Society with the result that during these last fourteen years it has succeeded in establishing throughout the United States and Canada some 400 approved tumor clinics and conferences. These tumor clinics meet once or twice a week, either in the hospitals or in the out-patient departments of the hospitals and cater particularly to the indigent cancer cases. These clinics have been instrumental in diagnosing and curing many thousands of early cancer cases and have eradicated thousands of precancerous lesions. The tumor conferences have performed an outstanding job in teaching the doctors what they should know concerning cancer lesions. This work has been done by doctors giving their time and skill without stint and without pay. But in spite of these cancer clinics and conferences, and in spite of all the propaganda that had been sent out by the American Cancer Society, it was apparent that the incidence of cancer was increasing and the mortality was but little if any improved. Something more definite had to be done if cancer was to be controlled. The American Cancer Society then decided that a full time director was needed who would execute the plans of the Society. Under the Director the idea was developed that cancer could be brought under control only by the expenditure of vast sums of money. This money was to be spent for cancer investigation, education of the laity, education of doctors, and financial aid to

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the afflicted. Then Mrs. Marjorie B. Illig, an employee of the American Cancer Society, suggested that she, working through the Women's Clubs of America could organize what would be called a Women's Field Army. The Field Army would be the agent, not only for collecting funds, but for dispersing cancer propaganda necessary for the education of lay people.

THE WOMEN'S FIELD ARMY, later renamed The Field Army, came to life about thirteen years ago and has become the dominant force in the cancer field. The Field Army determined from the first that it should be militant and aggressive and its propaganda should be optimistic and imaginative in order to catch and to hold the support of those who volunteered to aid the work. Its symbol was to be a drawn sword. Its slogan "Fight Cancer With Knowledge."

The potentiality of the Field Army is something tremendous. At present 300,000 women have been enrolled as members. To keep this army of women willing to work it is necessary to hold their interest by some activities other than going out once a year to raise money. The primary activity intended to enlist their interest was that of educating the public. During April when the drive for money is launched the Field Army plasters the countryside with posters indicating that cancer can be cured if treated early by surgery radium and X-ray. The public is advised to learn the signs and symptoms of cancer in order to protect themselves and their families. Then when the public seeks to learn the profound secrets that are to protect their homes from this insidious disease the Field Army hands them a copy of "Keys to Cancer Control" which consist of the following:

Key 1. Go to a competent physician at least once a year for a thorough physical examination.

Key 2. Watch for these Danger Signals—usually painless—that may indicate the presence of cancer.

1. Any persistent lump or thickening, especially in the breast.
2. Any irregular bleeding or discharge from any of the body openings.
3. Any sore that does not heal, particularly about the tongue, mouth or lips.
4. Persistent indigestion.
5. Sudden changes in the form or growth of a mole or wart.
6. Any changes in bowel habit.

This propaganda was definitely unsatisfactory to the public and to the members of the Field Army responsible for its distribution. But the women of the Field Army did a grand job in raising money — so good in fact that it was obvious that business men must be brought into the organization if the money

pouring into the coffers was to be handled efficiently for cancer control.

INVASION OF THE AMERICAN CANCER SOCIETY BY BUSINESS MEN: The advice of Mr. Eric Johnson, the head of the U. S. Chamber of Commerce was sought and under his guidance the American Cancer Society, in 1944, was reorganized with a Board of Directors made up of equal representation of lay business men and doctors and an Executive Committee that is predominantly made up of business men. The business men control the funds and as always happens the party that controls the purse strings controls the policy.

This refurbished American Cancer Society has had no difficulty in raising millions of dollars annually. The problem has been not in the raising of funds but in the wise expenditure in activities that will tend to reduce the incidence and mortality from cancer. The recently established detection clinics seemed to be a worthy activity, not only for expenditure of funds, but for keeping up the interests of the members of the Field Army.

ORIGIN OF DETECTION CLINICS: Most doctors have advocated that a yearly or semi-yearly examination by a competent physician has definite value as a way to preserve health. The Life Extension Institute was founded on this basic idea. The Connecticut State Medical Society, 15 years ago, advocated this plan. The American Cancer Society adopted this plan as the main key to Cancer Control. In 1937, Dr. Elise S. L'Esperance, who was the director of the Kate Depew Strang Tumor Clinic at the New York Infirmary for Women and Children, conceived the idea that it would be a worthwhile experiment to examine a few thousand supposedly well women and find out just how many pre-cancerous and early cancerous lesions, and other incipient diseases might be discovered in these women before any sign or symptoms had developed. The examination includes an inspection of eye, ear, nose and throat, larynx—lungs, heart, abdomen, pelvis and rectum. Also a routine urine analysis and complete blood count and a blood serology and an X-ray of the lungs and lately a smear of the cervix by Papanicolaou method. These examinations take about 40 to 50 minutes and the examinee is charged nothing up to \$15. If further investigations such as a G. I. Series or cystoscopy, etc., are indicated the patient is charged a small extra fee. Dr. L'Esperance set up a clinic for this purpose and called it a Cancer Prevention Clinic. In the first eight months, 71 patients were examined and 7 malignant tumors, and 20 benign growths were found. Encouraged by these results, Dr. L'Esperance was persuaded to start two similar clinics at the Memorial Hospital in New York.

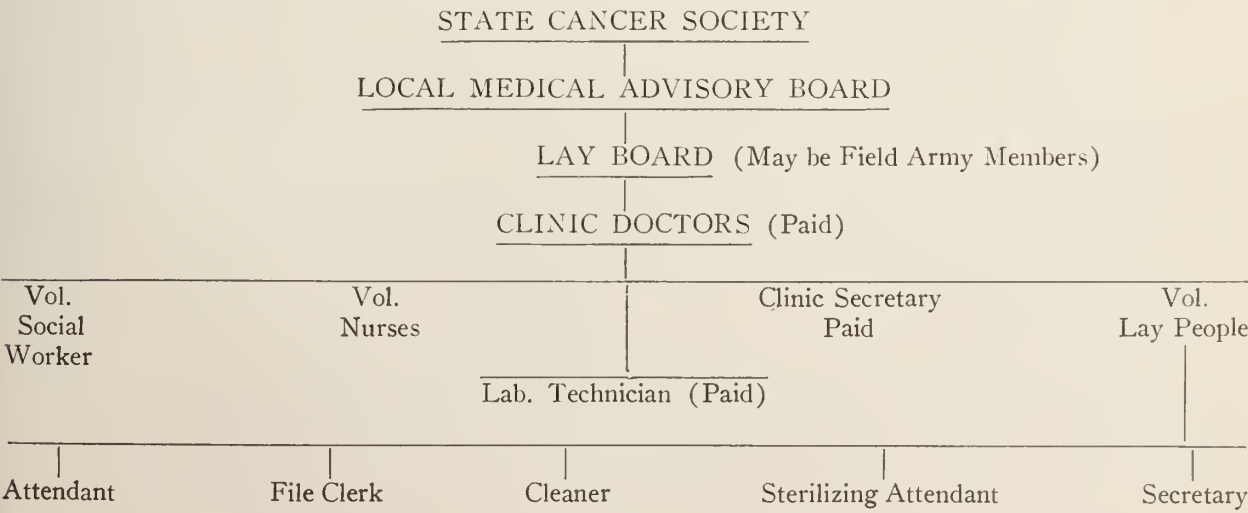
Then Mildred W. S. Schramm, Ph. D., the Execu-

tive Secretary of the International Cancer Foundation, decided that similar clinics with similar purposes should be established in each hospital of the various medical schools in Philadelphia. These clinics received considerable publicity before starting and were booked to capacity for six months ahead. In the first five months these eight clinics which Miss Schramm called Detection Clinics examined 919 patients and nine malignant lesions were found. These were situated as follows: 1 of the colon, 1 of the prostate, 2 of the fundus uteri, 1 of the gallbladder, 1 of the cervix, 1 of the peritoneum, 1 of the breast and 1 epithelioma of the skin. Other positive findings included 239 cervical lesions, 110 hemorrhoids, 77 varicosities, 67 cystoceles, 64 rectoceles, 33 gastrointestinal disturbances, 8 myomas, 8 lipomas, 3 fibromas of uterus and 4 unclassified benign tumors. These findings were reported in the scientific Journals and in the lay press. Laymen were led to believe that the clinics had developed new techniques and new instruments which made it possible for them to find early cancerous lesions which would not be found by the routine examinations made by the private physician.

It is not surprising that the public quickly became interested to know where they could obtain the superior medical services being offered for little or nothing by the Detection Clinics. Letters of inquiry poured into the offices of the American Cancer Society from all over the country. It did not take any great amount of crystal gazing on the part of the officials of the Society to realize that the Detection Clinics had appealed to the American people. The American Cancer Society immediately got busy and persuaded the American College of Surgeons and the American Medical Association to endorse the principles of these clinics. The only reservation made was that the permission of the various county medical societies must be obtained before trying to organize clinics. The reservation, at first, seemed to be a small obstacle, but the Field Army representatives

have found increasing opposition from county medical societies. The women have countered this opposition by trying to arouse a public clamor for the establishment of these clinics. They have attempted to do this by printing rosy articles concerning the clinics in the lay press and magazines. A typical article appeared in *Colliers Magazine**, written by Hannah Lees who obtained her material from the American Cancer Society and from Memorial Hospital in New York. The article features the recommendation that the way to control cancer is by the establishment of Detection Clinics in every city and town in the United States. She says that, "theoretically, of course, everybody could do just as well by going to her family doctor once or twice a year for a check-up but cancer detection is a pretty specialized and expensive thing. A family doctor is apt to be too busy with sick people to give an apparently healthy person the detailed examination that is necessary and hasn't the equipment for the important laboratory and X-ray work." Miss Lees also states that "Every one of the 20 clinics that have been started is already booked up for months ahead with appointments." She also points out that "The people who go to the cancer clinics pay a flat fee if they can afford it, and nothing if they can't and get many times the value of their fees in medical procedures."

These clinics are expensive to operate although they usually obtain, free of charge, all the needed space in the hospitals, as well as the use of technical equipment, light and heat, etc. But the doctors and nurses and secretarial help must be paid, as also must be the special laboratory tests performed by the hospital personnel, although these tests are obtained at a reduced figure. The smallest clinics will run a deficit of 5 to 10 thousand dollars a year but this is not an obstacle to starting a clinic because the American Cancer Society is willing to make up the deficit by a subsidy. The Field Army in Connecticut has proposed an organizational set up for a detection clinic as follows:



This is quite a formidable organization considering the fact that the clinic functions only for two hours, twice a week, and plans to examine but three new patients during each session.

PERSONAL REACTIONS. Detection Clinics are simply performing glorified annual or semi-annual physical examinations. The results obtained at the clinics will be no better or no worse than those obtained by a competent physician working in his office, but utilizing the available laboratory and X-ray facilities, also the Tumor Conferences, and calling in consultants when necessary. Many incipient diseases and abnormal physiological conditions will be found and theoretically most of the external cancers which make up 35% of the sum total of all cancers can be discovered and can be eradicated. Unfortunately as Dr. Ewing states, "65% of the total instances of cancer falls in the group of the stomach, liver, esophagus, lymph nodes, lungs, pancreas, gall-bladder and other internal organs. Doctors know that the fly in the ointment that prevents lowering the mortality from cancer is the fact that internal cancers do not give signs or symptoms until they are advanced. As Dr. Ewing says, "about 75% of all cancer cases are no longer early when they get into the hands of competent physicians and surgeons for treatment and this is a definite obstacle since the figures have changed but little in spite of the organization that has been set up to correct this condition." The propaganda, therefore, advising people to submit themselves for such examinations should not be over optimistic in promising protection from cancer.

2. Detection Clinics propose to examine any and all healthy persons irrespective of their financial status. These examinees, therefore, are the same ones who would normally seek the services of a private physician. The clinics therefore are in direct competition with the general practitioner and specialists. If it is desirable for the continuation of a few detection clinics stationed at the various medical schools for teaching purposes and for collecting statistical data on the results obtained it would be well to limit those examinations to indigent patients.

3. The Tumor Clinics that are already functioning in the hospitals or out-patient departments are theoretically for the diagnosis of cancer, but in practice many well patients are examined. On the other hand Detection Clinics, are for the examination of well patients, but in practice many patients with symptoms seek aid. In other words the Detection Clinics simply duplicate the work of the Tumor Clinics and are not necessary.

4. The fact that the clinic doctors are subsidized and are able to advertise puts the clinics in unfair competition with general practitioners. The clinic also enjoys free rent in the hospitals and has the laboratory within easy reach and at reduced cost.

The private physicians must send their specimens or their patients to the same laboratories and X-ray facilities from their distant offices and pay the prevailing rates. Why should the hospitals grant free office space, light, heat, and the use of instruments to a group of subsidized paid practitioners, and not grant the same privileges to the general practitioners, especially to the attending physicians and surgeons on the staffs of the hospitals — the very men who make the hospital a going institution? Why give special laboratory and X-ray rates one day, to a patient coming from the clinic, and a higher rate the next day to the same patient when referred by the general practitioner?

5. Why does the American Cancer Society subsidize the doctors running the Detection Clinics, which are to all intents and purposes medical clinics and not the doctors running Tumor Clinics and the Tumor Conferences?

6. The clinics are a definitely subsidized institution, subsidized by the American Cancer Society with money taken from the public for the purpose of controlling cancer. It is difficult to figure the cerebral gymnastics which made the American College of Surgeons and the American Medical Association fight the establishment of subsidized state medicine and at the same time advocate the establishment, within their hospitals, of clinics that are subsidized by the American Cancer Society which is dominated by lay business men, and is outside the control of organized medicine.

7. If annual examinations are essential to cancer control they should be made available to the whole population. But at the rate patients are examined in these clinics i.e., three in a two-hour session, and twelve during an eight-hour day, about 2,000 a year, every doctor in the United States would be needed to man these clinics and none would be available to care for the sick.

8. The cost of running these clinics would be astronomical — conservatively figured the cost would be at least \$1,250,000,000.00 a year.

9. The vast majority of general practitioners would willingly devote two hours a day to the examination of well patients if they were subsidized to the tune of \$25.00 for two hours work. This apparently is the prevailing price for such services. Such an arrangement would give the doctors at least eight more hours a day to devote to the care of the sick.

10. The American Cancer Society, through its propaganda has taught that cancer diagnosis is something intricate and beyond the ability of the ordinary general practitioner to accomplish. This is not true. External cancer, i.e. cancer that can be seen or felt by the examining fingers is simply another incidental pathological condition that should be, and is picked

up, by any complete routine physical examination, along with other diseases such as tuberculosis, diabetes, nephritis, anemia and a multitude of other diseases. As a matter of fact, cancer is much easier to diagnose than many of these diseases. To diagnose external cancer it is but necessary to see it, feel it, and perform a biopsy on it. There would be just as much sense in setting up separate Detection Clinics for each and every disease as there is for setting up separate clinics for the detection of cancer. Cancer and precancerous lesions are medical problems and must be sought for and recognized early by the general practitioner if they are to be successfully treated.

11. Detection Clinics are booked up for months ahead with appointments. This one fact defeats the purpose of the clinic because it will cause delay in making an early diagnosis. Every month, and sometimes every day of delay, decreases the chance of cure from this disease.

SUGGESTIONS FOR IMPROVED CANCER CONTROL: 1. More biopsies should be performed in the doctors' offices. This can be accomplished by supplying the doctors with adequate containers and fixing solutions through the State Health Department just as they are already provided with bottles for blood Wassermans. Also the biopsies should be done free of charge. In Connecticut, the State Department of Health through its Cancer Fund has offered to subsidize the hospital laboratories for biopsies submitted by the general practitioners. This is a worthwhile service and its universal adoption would bring into the cancer registry thousands of cancer cases that otherwise would not be registered.

2. X-ray examinations once a year would be a very valuable service but it should be under the supervision of the State Department of Health and not the American Cancer Society. In Connecticut such a service has already been started for suspected tubercular patients and could easily be extended for general pulmonary examinations.

3. Very few cancer patients can afford deep X-ray therapy. Deep X-ray therapy, free of charge, should be supplied to all indigent and near indigent cancer patients, and the hospitals supplying these treatments should be reimbursed by the State Department of Health's Cancer Funds.

4. The Women's Field Army should be kept out of clinical medicine. These women are well meaning but they are not trained to see the cancer problem as a whole, and they should have nothing to do with the cancer education of the public. The cancer edu-

cation of the public should be a joint endeavor of the Cancer Division of the State Departments of Health and the Tumor or Cancer Committees of the State Medical Societies. This leaves the Women's Field Army with nothing to do except raise funds for cancer research. It would, therefore, be better for the Women's Field Army to cease to exist as a separate entity and its personnel should be absorbed into the organization of the American Cancer Society.

5. Organized medicine; through its educational program in medical schools and hospitals, in tumor clinics and tumor conferences and graduate training program; has been able to teach and is continuing to teach the average doctor what he should know concerning cancer in order to cope with it to the fullest extent of modern medical and surgical knowledge. There is no need to supplement this training by instruction from the American Cancer Society. If some doctors are careless or ignorant—this is a problem for more education and maybe for law, but it is not a reason for the establishment of Detection Clinics.

6. The American Cancer Society should change its name to American Cancer Foundation and it should stop spending its funds for the education of the public and the education of the doctors and for the care of cancer victims. These functions can all be better performed through the State Department of Health, organized medicine and public welfare societies. The function of the American Cancer Foundation should be the raising of funds for cancer research and the proper expenditure of such funds.

7. There is a need for a strong cancer organization within the control of organized medicine. The nucleus for membership could be the members of the various State Tumor or Cancer Committees that are appointed by the State Medical Societies and the governing body would be the Cancer Committee of the American College of Surgeons. The members of this committee could be the Chairman of the State Cancer Committees. By these means the cancer control organization would stay where it belongs under the wings of organized medicine.

"Organization of Cancer Prevention Clinics" (M. W. S. Schram), *M. Officer*, 75:23-24, Jan. 19, 1946.

"Cancer Prevention Clinics" (E. S. L'Esperance), *M. Woman's J.*, 51:17-21, Jan., 1944.

"All Out Against Cancer" (Hannah Lees), *Colliers Magazine*, Feb. 23, 1946.

"Treatment of Cancer" (Drs. Pack and Livingston), Dr. James Ewing, Pg. 3, Chapter 1.

It appears obvious that we have arrived at a point in this country where the dissemination of bovine tuberculosis is no longer a matter of serious concern.

H. M. O'Rear, D. V. M., *Disease of the Chest*, July-August, 1947.

CLINICO-PATHOLOGICAL EXERCISE

Medical Case Presented at the Eastern Maine General Hospital

Dr. GEORGE ROBERTSON, presiding

Edited by JOSEPH E. PORTER, M. D.

This 69-year-old shoe repairer was admitted to the E. M. G. H. because of a loss of consciousness. His wife states that he was a known hypertensive for about ten years. About five months prior to this admission he was hospitalized elsewhere because of "nervous trouble," heart trouble, liver trouble and hardening of the arteries. Since that time he has had a change in personality with frequent episodes of unreasonableness and confusion. Three days prior to present admission he consulted his physician because of difficulty getting his breath. This morning he appeared quite normal but quite confused, and unable to talk or move. After being placed in bed he seemed somewhat improved, but remained confused. The patient remembers finding himself on the floor and trying to get up, but does not remember any more details about this episode. Although the patient has had attacks of dyspnoea, he has been able to climb stairs and walk uphill without getting out of breath. He has had frequent palpitation, night sweats and a productive cough. There has been no hemoptysis. He has had frequency nocturia and polyuria for several years. There has been no dysuria. For five months he has had tremors of the hands and feet and some weakness of the arms.

Physical Examination: Temp. 101° F.; Pulse 110; Respirations 28. The patient is a well developed, well nourished, somewhat confused but fairly well orientated male. The blood pressure is 210/95 (left arm) and 205/80 (right arm). There is moderate distention of the veins of the neck. There is no stiffness. The pupils are regular. The left is larger than the right. The tongue is dry and coated. Teeth are in poor condition. The chest is symmetrical with equal expansion. There are a few moist rales at the left base where the breath sounds are diminished. Percussion note and fremitus are within normal limits. The apex impulse is forceful. The heart sounds are of good quality. The rhythm is grossly irregular. There is a soft systolic murmur at the apex. The abdomen is soft and non-tender. The liver and spleen are not palpable. There is a moderate weakness of the arms, more so on the left. There is some atrophy of the left hand and forearm. There is increased pretibial edema bilaterally. The deep tendon reflexes are equal and active. There is no clonus or Babinski sign.

Lab. Findings

Urine: Straw-colored, cloudy, alkaline, 1.008, trace of albumin, negative sugar, negative acetone. Sediment shows a few leukocytes and occasional erythrocytes.

Blood: Sedimentation rate 12 m.m./hr. N.P.N. 44 mgm./100 cc. Hb. 12.5, WBC 14,600, Polys 70%; Young forms 16%; Small lymphocytes 13%; Monocytes 1%. Kahn and Hinton negative.

Cerebrospinal Fluid: Initial pressure 180 mm. H₂O. Fluid clear and colorless. 1 leukocyte per cu. mm. 2 erythrocytes per cu. mm. Total protein, 35 mgm./100 cc. Dextrose, 60 mgm./100 cc.

Phenolsulfonphthalein Excretion: 30% in two hours.

Urine Concentration: Spec. grav. 1.012.

E.K.G. The electrocardiograms reveals normal rhythm; Rate 75, Conduction normal, P and QRS waves normal. T-waves in leads I and II are inverted. T-waves in lead IV are diphasic.

X-ray: The heart is moderately enlarged in all diameters especially toward the left. The lung fields show moderate thickening in the root regions but no evidence of appreciable pulmonary congestion. The aortic knob and arch show well marked sclerosis.

Course in Hospital: The patient's temperature dropped to normal the day after admission and remained normal throughout the remainder of his hospital stay. Examination of his eye-grounds revealed a grade IV retinopathy with hemorrhages, exudates and papilloedema. After nine days of hospitalization his respirations rose to 28. His blood pressure rose to 240/128. He developed a definite left facial paralysis. He remained in rather poor condition until his death three days later. He was apparently sleeping quietly when he suddenly gave a few gasps and stopped breathing.

DISCUSSION

Dr. Wilbur Manter: This 69-year-old man had had known hypertension for ten years with some minor degrees of heart failure. His urine has shown poor concentration and some albumin. There is a moderately enlarged heart. The electrocardiogram

reveals abnormal T-waves in leads I, II, and IV and is consistent with left ventricular strain. His shortness of breath three days prior to admission is indicative of a failing heart. The outstanding problem of diagnosis appears to be the nature of the cerebral changes. The symptoms of personality change, hypertension, tremors and weakness of the extremities, confusion, asphasia, left facial paralysis, atrophy of the left hand and forearm in a man of 69 years suggest four possibilities:—general paresis, brain tumor, cerebral atherosclerosis and hypertensive encephalopathy. I am willing to dismiss immediately the possibility of general paresis because of the negative blood serology, the low spinal fluid protein, the low spinal fluid cell count, and the lack of certain neurological findings usually associated with general paresis. The five months' history of tremors of the hands suggest the possibility of a lesion in the basal ganglia. On the day of admission, he experienced unconsciousness which was apparently sudden in onset and which was followed by a fair recovery but with some residual confusion. No localizing neurological signs are recorded in connection with this episode. It suggests a small cerebro-vascular accident, perhaps hypertensive encephalopathy with cerebral edema.

A point of interest in the physical examination is the weakness and atrophy of the left hand and forearm. I would like to know if the patient was left-handed. Progressive muscular atrophy with predominant left-sided involvement might be considered as a possible explanation but this seems to me an unlikely diagnosis. Atrophy is usually not prominent with uppermotor neuron disease, though it may occur.

The personality change, the weakness of the left hand and the left facial paralysis might be produced by multiple emboli associated with his auricular fibrillation. However, the only findings to suggest multiple emboli are manifestations of involvement of the central nervous system. If multiple emboli had been thrown off from the left auricle we would expect to find evidence of emboli elsewhere as in the spleen, kidneys, extremities or skin.

Dr. George Robertson: It should be pointed out that the atrophy and weakness of the left hand and forearm were apparently residuals of poliomyelitis which he had in childhood.

Dr. Wilbur Manter: The changes in the eye-grounds are more characteristic of hypertension than they are of tumor. The normal spinal fluid pressure and normal spinal fluid protein are in favor of a hypertensive etiology. Furthermore the apparent multiplicity of lesions make the diagnosis of tumor unlikely but seem to fit in better with multiple vascular lesions. An occlusion of the right recurrent ar-

tery of Heubner, a branch of the anterior cerebral artery might produce motor weakness of the left arm and face. The higher (second) blood pressure reading seems to be more in accord with the rest of the picture.

Dr. Richard Wadsworth: The reading of 240/128 was recorded on his eighth hospital day. He was in the hospital eleven days.

Dr. W. Manter: The mode of exodus is not entirely clear. "He was sleeping quietly when he suddenly gave a few gasps and stopped breathing." This does not sound like a respiratory center paralysis. His 11-day hospitalization was sufficient time for the development of a phlebothrombosis and resulting pulmonary embolus. It is possible that he died a cardiac death due to sudden arrest or ventricular fibrillation perhaps associated with coronary thrombosis.

Dr. Herbert Clough: Why did this patient have a fever and leukocytosis? Do you attach any particular significance to his high pulse pressure? Is there any relationship between the high pulse pressure and the apical systolic murmur? Do you think he had sufficient coronary disease to produce myocardial infarction?

Dr. W. Manter: Cerebral infarcts are not infrequently associated with fever and leukocytosis. They might be an explanation. A broncho-pneumonic process might account for these findings. I do not attach any particular significance to the high pulse pressure. Such a pulse pressure is not unusual in arteriosclerotic hypertension. On admission it may have been associated with a "shock-like" state; his later blood pressure was not as unusual so far as pulse pressure is concerned. There is no evidence that this patient had aortic regurgitation. I could not make a diagnosis of infarct by his electrocardiogram. I believe he had left ventricular strain and coronary artery disease, but do not feel that myocardial infarction played a role in the case, except perhaps terminally.

Dr. Lawrence Cutler: A coronary occlusion appeals to me in this case. It would account for his sudden demise. Do you think that subacute bacterial endocarditis should be considered? Many elderly people with this condition fail to show a febrile course.

Dr. W. Manter: I believe there is not sufficient evidence to make the diagnosis of subacute bacterial endocarditis. The findings appear more typical of hypertensive heart disease with hypertensive encephalopathy.

Dr. H. Clough: How is it possible to explain fever on the basis of cerebral vascular lesions?

Dr. R. Wadsworth: This patient's temperature

was elevated to 101° F. only on the first hospital day. His subsequent temperature was essentially normal. Of course extremely high temperatures may be associated with hypothalamic lesions. Within the past two weeks we saw a patient with multiple hemorrhages in the hypothalamus whose temperature stayed between 103° and 105° F. throughout his three days of hospitalization.

Dr. Joseph Lezberg: Three days prior to admission the patient consulted his physician because of dyspnoea. Should we attribute this dyspnoea to heart failure or to a beginning pulmonary infection?

Dr. W. Manter: The negative chest films and the prompt return to normal of his temperature shortly after admission are against pulmonary infection. Because of the frequency of terminal bronchopneumonia found by the pathologists in elderly people I should say that statistically we should mention that possibility.

Dr. L. Cutler: I believe that the electrocardiographic changes in lead II are sufficient to say that there was definite myocardial infarction rather than strain and I believe that the episode three days prior to admission was probably an infarct of the myocardium.

Dr. W. Manter's Diagnosis:

Hypertensive cardio-vascular renal disease with hypertensive encephalopathy, associated with multiple small vascular lesions, probably thromboses.

Physician: Is it not true that most cases of hypertensive encephalopathy show a complete lack of anatomical findings?

Dr. W. Manter: In my own mind I have discarded the concept of angiospasm as a cause of focal signs in these patients. I believe that hypertensive encephalopathy is associated with vascular occlusion. The old concept of the cerebral arteries being end-arteries is no longer tenable. There is considerable collateral circulation in the brain. The transient symptoms in some cases of hypertensive encephalopathy can be explained by the substitution of collateral circulation when small vessels are occluded.

Dr. R. Wadsworth: Several times during the past year at our Medical Conferences we have discussed patients with the clinical picture of hypertensive encephalopathy. Each time the question of anatomical changes in the nervous system has been raised. It was because of the opportunity to demonstrate such anatomical changes in a patient whom we had previously discussed on Medical Rounds that this case was chosen for presentation at a Pathologic Conference.

The term, hypertensive encephalopathy was introduced in 1928 by Oppenheimer and Fishberg.¹ For approximately twelve years it was used rather loosely

to cover a rather wide range of vascular cerebral lesions found in hypertensive patients. It is used primarily to designate transient disturbances of cerebral function in hypertensive patients characterized by headache, dizziness, convulsions, paralysis, sensory disturbances, aphasia, blindness, mental confusion and stupor or coma. The duration of these symptoms are variable and they may recur. In the fatal cases which are carefully studied definite anatomical lesions can usually be distinguished.

The changes are primarily in the cerebral arterioles and have been described by Scheinker (1943)² under the name of Hypertensive Arteriopathy. Most of the arterioles and capillaries exhibit widespread, diffuse thickening, homogenization and hyaline degeneration of the entire wall with some fibrous thickening of the periadventitial tissue and a moderate degree of perivascular infiltration. Such changes were present in this case.

The heart weighed 700 grams, and showed marked left ventricular hypertrophy. There was moderate sclerosis of all of the coronary arteries, but no occlusion of the major branches were observed. No gross areas of infarction were demonstrable. The pallor of the myocardium suggested small scattered areas of scarring. The left lung showed scattered areas of pneumonic consolidation. The kidneys had a combined weight of 255 grams. The cortical surfaces were coarsely granular and the cortices were diminished in thickness.

The brain weighed 1390 grams. The vessels at the base of the brain were markedly sclerotic, rigid and showed diminution of the diameter of the lumina. Multiple sections through the brain revealed multiple small sharply-defined hemorrhages in the thalamus, caudate nucleus, hypothalamus, cerebral cortex and in the subcortical white matter. In microscopic sections there are marked changes in the blood vessels. In all sections there is striking hyalinization of the arterioles. There are small cuffs of lymphocytes about some of the vessels occasionally associated with hemosiderin-laden phagocytes. There are occasional sharply defined, small, irregular areas of edema. In none of the sections can cerebral histiocytes be distinguished in the areas of edema. No glial scarring is observed. In one section of cerebellum the dentate nucleus shows central edema with loss of cells but no phagocytosis or inflammatory reaction. Many small venules are distended with erythrocytes. Occasional small ring hemorrhages and numerous ball hemorrhages are scattered throughout various sections.

Sections from the right motor cortex from the general level of the face area reveal moderate vacuolization of the subcortical white matter. The Betz

Continued on page 332

THE PRESIDENT'S PAGE

The Red Feather campaign for the support of social agencies has just ended.

Next comes the Christmas Seal, sponsored by the National Tuberculosis Association, and, in Maine, carried on by the Maine Public Health Association. With the opening of this campaign we are again reminded that the battle against tuberculosis is still waging and much remains to be done to win greater control of this all too prevalent disease.

Surveys by the United States Public Health Service in 1944 revealed 12,261 cases of tuberculosis in 1,165,817 persons. Seventy per cent of these were minimal in lung involvement.

Mass surveys in Washington, D. C., from January to July, 1948, showed 5,000 cases of unsuspected tuberculosis in 503,398 persons, with about 83% minimal.

The fundamentals of tuberculosis control are not changed by time, nor war, nor peace. They always are: find the sick—treat the patient—restore earning power—prevent the spread of the disease—keep the family together.

Methods of control are still—education of young and old; development of more widespread diagnostic facilities; utilization of continued refinements in treatment techniques offered by the medical profession;—all aided by the use of more and more Christmas seals.

Members of the Maine Medical Association are always vitally interested in all efforts to improve the health of our people throughout the State.

FORREST B. AMES, M. D.,
President, Maine Medical Association.

EDITORIAL

The Fall Clinical Session

The Fall Clinical Session of the Maine Medical Association, sponsored by the Cumberland County Medical Association, was held in Portland, Monday and Tuesday, November 1 and 2, with a registered attendance of 134 members and guests. There were, however, many who did not register as 300 doctors visited the Monday and Tuesday clinics at the Maine General Hospital, Maine Eye and Ear Infirmary, and Mercy Hospital.

At the Maine General Hospital, on Monday, a chest surgeon and a medical anaesthetist, whose services only recently became available to the hospital, highlighted the program. At the Maine Eye and Ear Infirmary the following subjects were discussed, "Differential Diagnosis of Glaucoma from the Standpoint of the General Practitioner," "Eye Manifestations of General Systemic Diseases," and "Recognition and Treatment of Abnormal Eye Conditions in Children." The Mercy Hospital presented an Orthopedic Clinic conducted by Drs. Leo J. McDermott, Thomas A. Martin, William A. Monkhouse, William L. Casey, and G. E. C. Logan.

At the Eastland Hotel ballroom, Monday afternoon, Dr. Dean H. Fisher, Augusta, Chief of the State Department of Health, spoke on "Treatment of Syphilis," Dr. Eugene H. Drake, Chief of Staff at the Maine General Hospital, on "Acute Respiratory Distress—Its Cause and Treatment," Dr. John R. Lincoln, Anaesthetist at the Maine General Hospital, on "Selection of Patients for Anaesthesia and Surgery," Dr. George L. Maltby, Portland, on "Convulsive States," and Dr. Philip P. Thompson, Jr., Portland, on "Recent Trends in Antibiotic Therapy."

Dr. T. Duckett Jones, Medical Director of the Helen Hay Whitney Foundation in Boston, spoke to members and their wives at the dinner Monday evening in the Eastland Hotel. Dr. Jones called upon Maine doctors to formulate community-wide plans for an attack on rheumatic fever.

On Tuesday morning, Medical Service Grand Rounds at the Maine General Hospital was followed by a paper on "Clinical Value of Cerebral Angiography" by Dr. W. Henry Harper, and case presentations by the Pediatric Service. At the Maine Eye and Ear Infirmary the following subjects were discussed, "Swimming and its Effect on Ears and Sinuses," "Allergic Rhinitis," "Sulfonamides and Penicillin in Diseases of the Ear, Nose, and Throat," "The Common Cold," and "Deafness in Children Following Unoperative Mastoiditis." At the Mercy Hospital a clinic on Obstetrics and Gynecology was conducted by Drs. Eugene E. O'Donnell, C. E.

Skillin, Francis M. Dooley, John V. Ward, Lawrence W. Coneen, G. E. C. Logan, Eugene C. McCann, and K. Alexander Laughlin.

Speakers at the Tuesday afternoon "Cancer Symposium" in the Eastland Hotel ballroom included Dr. Grantley W. Taylor, Assistant Professor of Surgery at Harvard Medical School, whose subject was "What Can Be Accomplished In Cancer Therapy," and Drs. C. Lawrence Holt, George O. Cummings, James M. Parker, Theodore C. Bramhall and Isaac M. Webber, all of Portland.

Members of the Maine Medical Association attending the dinner Monday evening stood while Dr. Forrest B. Ames, of Bangor, President of the Association, read a tribute to Dr. Edward L. Herlihy of Bangor, Councilor for the Sixth District, who died suddenly that morning.

The Council of the Maine Medical Association in session Monday afternoon elected Dr. Martyn A. Vickers of Bangor, to the Council to fill Dr. Herlihy's unexpired term.

Members attending a meeting of Special Committee Chairmen, that same afternoon, included Dr. Joseph E. Porter, Committee on Graduate Education; Dr. Thomas A. Foster, Committee on Maternal and Child Welfare; Dr. P. L. B. Ebbett, Amy W. Pinkham Fund Committee; Dr. Charles W. Steele, Committee on Civilian Defense; Dr. Eugene H. Drake, Health Insurance Committee; Dr. Clyde I. Swett, Committee to Supervise Nurses' Training; Dr. Martyn A. Vickers, National Physicians' Committee; Dr. Richard C. Wadsworth, Committee on Blood Transfusions; and Dr. Stephen A. Cobb, Committee to Study Revision of Constitution and By-Laws. These committee chairmen reported briefly relative to the activities of their respective committees.

The need for general practitioners in the State was discussed at a meeting of County Secretaries, Monday afternoon, and it was agreed that this information be obtained by the County Societies through the use of a questionnaire to be drawn up by the Executive Secretary of the State Association, Mr. Payson.

Dr. Ralf S. Martin, Chairman of the Committee on Arrangements for the Clinical Session, and members of his committee, are to be commended for the excellence of the program. We feel that these fall clinical sessions are of great value to the members of the Association, and that a larger number of members should avail themselves of this opportunity to continue their medical education.

REPORT OF DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION

The last annual meeting of the A. M. A. was held in Chicago on the same June days as our State Meeting. Your delegate enjoyed, as always, the meeting of the parent association but regretted missing for the first time in many years our State Society Meeting. At this time he would like to express his appreciation of his re-election for another term of two years.

The House of Delegates was called to order by Dr. Roy Fouts promptly at 10 o'clock with only 1 or 2 delegates or their alternates absent. One of the first functions of the House is to select the recipient of the Distinguished Service Medal. It was a particular pleasure for the delegate from Maine to vote for Dr. Isaac Abt, pioneer pediatrician of Chicago, who received the highest number of votes and was awarded the medal.

The reports of the officers emphasized the need for unity in the profession and stressed the importance of three developments; the critical nursing situation, the growing voluntary prepayment plans for medical care, and the emergency medical service responsibilities associated with the military draft and the eventuality of war.

The nursing situation is under study and discussion by a strong committee headed by Dr. Thomas Murdock of Connecticut. Some of the suggestions made at the meeting of our House of Delegates at York Harbor are being considered by this group, and the next report promises to offer recommendations which will help all hospitals, large and small.

The development and extension of voluntary, prepaid medical service plans is in the hands of the Council on Medical Service of which Dr. James R. McVay of Kansas City is chairman and Thomas A. Hendricks is Secretary. The Council maintains an office in Washington. Information on legislative matters may be secured from this office by addressing, Dr. Joseph S. Lawrence, 1302 Eighteenth Street, N.W., Washington, D. C. General Hawley spoke to the House on the subject of prepaid medical care plans and stated forcibly his belief that the profession should move quickly and firmly in the direction of group plans for prepaid medical care. He maintained in his remarks that the people favor it, will support it. No one could hear the General speak on the subject and remain unimpressed with the force of his argument for more prepaid voluntary medical care plans.

The National Emergency Medical Service Council of which Dr. James Sargent of Milwaukee is Chairman, is studying the matter pertaining to the supply, rotation, and replacement of medical officers.

This is a new Council established in June, 1947, following the suggestions of Dr. Bortz, then president of the A. M. A. It has some critical problems for discussion, problems which concern every member of the medical profession.

These Committees and Councils are working day and night for the best interests of the medical profession. Your delegate is impressed with the fact that the A. M. A. is aware of the problems which confront the ranks and file of the profession, and is creating Committees and Councils to study them and to offer solutions as rapidly as possible.

Our immediate Past President, Dr. Cobb, and our President, Dr. Ames, have called your attention to these situations in the pages of our JOURNAL. It becomes apparent to your delegate in increasing measure that the problems of the doctors in our State Society are the problems of the A. M. A., and your delegate is learning that the delegates in the National House are working to help the situation, not only for the doctors in Maine but also for the doctors in the other 47 states of the Union.

The stalwart President Elliott of Harvard College once remarked that progress comes slowly. If the A. M. A. seems to move in a deliberate manner, try to remember that in a democratic deliberative body, all voices have a right to speak, all suggestions must be heard, and decisions must be carefully made. The A. M. A. is working for you.

In conclusions, let it be said that the A. M. A. is sound and secure. After a spirited election, Dr. Irons of Chicago was elected President. Dr. Hamilton of Illinois, Dr. Walter Martin of Norfolk were elected to the Board of Trustees, and Dr. Gunnar Gunderson of LaCrosse, Wisconsin was also elected a Trustee. Dr. Fouts, who has served as Speaker of the House since the resignation of Dr. Shoulders, did not care to be a candidate for re-election as Speaker. Therefore, Dr. F. F. Borzell of Philadelphia was elected Speaker and Dr. Reibling of New York was elected Vice Speaker. A good deal of organizational work was done by the delegates. Two of the most important accomplishments were first, a revision of the Constitution and By-Laws, and secondly, a revision of the Code of Ethics. No revolutionary changes were introduced into either revision. The Interins Meeting designed especially for the General Practitioner will be held in St. Louis on November 30 to December 3rd, 1948.

The next annual meeting will be held in Atlantic City in June, 1949, and it is the hope of your delegate that many of our members will plan to attend the meeting.

THE USE OF STREPTOMYCIN IN TUBERCULOSIS

A Report by the Committee on Chemotherapy and Antibiotics of the American College of Chest Physicians

The Committee on Chemotherapy and Antibiotics of the American College of Chest Physicians submits the following report of the use of streptomycin in tuberculosis.

Indications for Treatment:

Nearly all forms of tuberculosis respond to treatment with streptomycin in some degree. However, the drug should by no means be used indiscriminately.

Pulmonary Tuberculosis: It is extremely difficult to lay down hard and fast rules for the use of streptomycin in pulmonary tuberculosis. Especial care in the selection of cases is necessary. The drug has its greatest usefulness in cases with an appreciable amount of exudative disease. In some cases streptomycin is responsible for symptomatic improvement and the prevention of complications.

1. *Definitive Treatment:* This category includes chiefly progressive lesions of recent origin with little or no destruction of tissue, such as progressive primary tuberculosis and tuberculosis due to hematogenous and bronchiogenic dissemination.

2. *Preparation for surgical procedures,* including temporary and permanent collapse and excisional surgery. In some cases pneumothorax can be instituted sooner and with greater safety after a course of streptomycin. Not infrequently the drug is of great value in preparing patients as candidates for thoracoplasty. As prophylaxis, streptomycin should be used routinely in excisional procedures.

It must be emphasized again and again that streptomycin is *not* a substitute for sanatorium care and other proven procedures. Rather it is a valuable adjunct to these other measures.

Extrapulmonary Tuberculosis: Streptomycin is the only treatment available in miliary tuberculosis and tuberculous meningitis. In such cases early and intensive treatment is imperative. Streptomycin is the treatment of choice for tuberculous sinuses, tuberculosis of the oropharynx, larynx and tracheo-bronchial tree, tuberculous enteritis and peritonitis, tuberculous otitis media, and tuberculous pericarditis. In renal tuberculosis, symptomatic improvement is usually prolonged and bacterial conversion occurs in some cases. Tuberculosis of the bones and joints is

often improved by streptomycin but chemotherapy is not a substitute for orthopedic surgery when this is indicated.

Streptomycin is valuable as pre-operative and post-operative treatment of tuberculosis in surgery of the genito-urinary tract, surgery of bones and joints, pericardiolysis, incision and drainage of abscesses and fistulectomy.

Administration:

Streptomycin is administered by intramuscular or deep subcutaneous injection. The optimal regimen for the administration of streptomycin has not been determined. In most forms of tuberculosis results appear to be satisfactory when a dose of .5 to 1 gram a day are administered in one or two injections for six to eight weeks. With this mode of therapy complications are very infrequent and in most cases their clinical importance may be discounted. In tuberculous meningitis and miliary tuberculosis treatment should be vigorous; a dose as high as two grams per day for four months, or longer if necessary. In tuberculous meningitis results seemingly are better when intramuscular injection is supplemented by intrathecal injection of from 25 to 50 milligrams every twenty-four to forty-eight hours for two or three months, or as long as this method of administration is tolerated by the patient.

Since drug fastness is apparently closely related to duration of treatment, regardless of the daily dosage, limitation of the period to a few weeks may be effective in avoiding this phenomenon in many cases.

The physician handling a case of tuberculosis would do well to ask himself the following questions before administering streptomycin.

1. Why is streptomycin being used: for definitive therapy, as preparation for surgery, for prophylaxis, or for relief of distressing symptoms?

2. Is the type of lesion present of such a nature as to warrant the use of streptomycin in addition to other available therapy?

3. Can the purpose of chemotherapy be accomplished within the relatively short period of the drug's effectiveness? (Almost three-fourths of the patients show resistant organisms after three to four months of continuous daily streptomycin treatment.)

Continued on page 326

-In Retarded Intestinal Motility--



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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

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*The Use of Streptomycin in Tuberculosis—Continued from page 324**Other Chemical and Antibiotic Substances:*

There is no other substance known today which compares with streptomycin in its effectiveness against tuberculosis. The sulfones, promin and promizole, are generally ineffective alone. Experimental work is in process to determine whether or not there is synergistic action when any of these are added to streptomycin. Para-aminosalicylic acid is promising on the basis of laboratory experimentation but sufficient clinical work has not yet been done to permit evaluation of this drug. Subtilin has not had sufficient clinical trial and there is not yet enough animal experimentation to indicate its usefulness. Of the many other antibiotic substances, none has shown in preliminary experimentation indication of real value against tuberculosis and none has had clinical trial.

Submitted for the Committee on the Management and Treatment of Diseases of the Chest by the Subcommittee on Chemotherapy and Antibiotics.

Committee on Chemotherapy and Antibiotics:

Karl H. Pfuetze, M. D., Cannon Falls, Minnesota, Chairman.

B. L. Freedlander, M. D., San Francisco, California, Vice-Chairman.

Summer S. Cohen, M. D., Oak Terrace, Minnesota, Secretary.

Manuel Albertal, M. D., Buenos Aires, Argentina.

Arnold Shamaskin, M. D., Hines, Illinois.

Henry C. Sweany, M. D., Chicago, Illinois.

Carl W. Tempel, Col., M. C., Denver, Colorado.

John V. Thompson, M. D., Indianapolis, Indiana.

Committee on the Management and Treatment of Diseases of the Chest:

Edwin R. Levine, M. D., Chicago, Illinois, Chairman.

HOSPITAL STAFF MEETINGS**Open to the Profession**

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.

COUNTY SOCIETIES

Androscoggin

President, Paul R. Chevalier, M. D., Lewiston
Secretary, Glidden L. Brooks, M. D., Lewiston

Aroostook

President, Rosario A. Page, M. D., Caribou
Secretary, Clyde I. Swett, M. D., Island Falls

Cumberland

President, Harold J. Everett, M. D., Portland
Secretary, Joseph E. Porter, M. D., Portland

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President, Maynard B. Colley, M. D., Wilton
Secretary, Kenneth A. LaTourette, M. D., Farmington

Hancock

President, M. A. Torrey, M. D., Ellsworth
Secretary, Robert H. Delafield, M. D., Ellsworth

Kennebec

President, William L. Gousse, M. D., Fairfield
Secretary, Arch H. Morrell, M. D., Augusta

Knox

President, Wesley N. Wasgatt, M. D., Rockland
Secretary, Freeman F. Brown, Jr., M. D., Rockland

Lincoln-Sagadahoc

President, Virginia C. Hamilton, M. D., Bath
Secretary, Neil L. Parsons, M. D., Damariscotta

Oxford

President, Roland L. McCormack, M. D., Norway
Secretary, Dexter E. Elsemore, M. D., Dixfield

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President, Martin C. Madden, M. D., Old Town
Secretary, Herbert C. Scribner, M. D., Bangor

Piscataquis

President, George C. Howard, M. D., Guilford
Secretary, Norman H. Nickerson, M. D., Greenville

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President, Maurice E. Lord, M. D., Skowhegan
Secretary, Edwin M. Lord, M. D., Skowhegan

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President, John A. Caswell, M. D., Belfast
Secretary, Raymond L. Torrey, M. D., Searsport

Washington

President, Willard H. Bunker, M. D., Calais
Secretary, Karl V. Larson, M. D., East Machias

York

President, Paul S. Hill, Jr., M. D., Saco
Secretary, C. W. Kinghorn, M. D., Kittery

COUNTY SOCIETY NOTES

Kennebec

A regular meeting of the Kennebec County Medical Association was held at the Elmwood Hotel, Waterville, on Thursday, October 21, 1948, at 6.30 P. M.

The speaker of the evening was Dr. Howard Ulfelder of Boston, whose subject was "The Management of Certain Common Gynecological Problems."

His interesting, illustrative talk was followed by a period of discussion.

There were forty-one present.

A. H. MORRELL, M. D.,
Secretary.

Lincoln-Sagadahoc

A meeting of the Lincoln-Sagadahoc Medical Society was held at "Day's" in Newcastle, Tuesday evening, October 19, 1948.

The guest speaker was Mr. Bradford Lawrence, of Tennessee, who spends his summers in this area.

He showed moving pictures and gave a talk on Management and Labor in our Country, with methods of combating communism and socialism.

A discussion then followed on Socialization of Medicine.

NEIL L. PARSONS, M. D.,
Secretary.

Oxford

The annual meeting of the Oxford County Medical Society was held at Bethel Inn, Bethel, Maine, on Wednesday, October 13th. The following officers were elected:

President, Roland L. McCormack, M. D., Norway.

Vice President, Linwood M. Rowe, M. D., Rumford.

Secretary-Treasurer, Dexter E. Elsemore, M. D., Dixfield.

Committee on Legislation, Chesley W. Nelson, M. D., Norway.

Councillors: Joseph A. Villa, M. D., South Paris — 1 year; Roswell E. Hubbard, M. D., Waterford — 2 years; Garfield G. Defoe, M. D., Dixfield — 3 years.

Delegates to the Maine Medical Association Meeting: Delbert M. Stewart, M. D., South Paris — 1 year; Walter G. Dixon, M. D., Norway — 2 years. Alternates: William T. Rowe, M. D., Rumford — 1 year; John A. Matheson, M. D., Bethel — 2 years.

At the Scientific Session of this meeting, a panel discussion entitled "Joint Trauma" was presented by: Leo McDermott, M. D., Portland, Maine; Joseph Geisen, M. D., Waterville, Maine; Howard Apollonio, M. D., Rockland, Maine.

DEXTER E. ELSEMORE,
Secretary.

Washington

A meeting of the Washington County Medical Society was held October 28, 1948, at the Dr. John F. Hanson Farm, Kennebec District, Machias, Maine, with fifteen members and five guests present.

A dinner prepared by members of the Congregational Church Guild, was served with Mrs. John Hanson as hostess and Mrs. Karl Larson, Mrs. Stanley Sabean, and Mrs. Mildred Heighton, as waitresses.

The meeting was called to order by the President, Willard H. Bunker, M. D., of Calais. He introduced Forrest B.

Ames, M. D., of Bangor, President of the Maine Medical Association, who spoke concerning plans for Prepaid Medical Care, plans for re-opening the Maine Medical College, and on other matters which will come up before the November 1 and 2 meeting of the Maine Medical Association at Portland.

Dr. Bunker then introduced Clement S. Dwyer, M. D., of Bangor, chief anesthetist of the Eastern Maine General Hospital, who spoke on Modern Anesthesia. In a very excellent talk he covered the duties of anesthesiologist and the status and use of the various anesthetic agents. His paper was discussed by several members present.

A business meeting was then held and the subject of Prepaid Medical Care came up for active discussion. The majority of doctors spoke in favor of Prepaid Medical Care and thought that it was the only answer to State medicine. Dr. H. S. Everett and Dr. E. V. Thomas of St. Stephen, New Brunswick, spoke concerning State Medicine in England. Dr. Norman H. Cobb of Calais, councilor of this district, was asked to take up the status of Prepaid Medical Care at the next council meeting.

Guests present were Drs. Austin Longfellow of Machias, Lloyd Brown of Bangor, and Francis G. Benedict of

Machiasport, former head of Carnegie Institute of Nutrition in Boston.

It was voted to hold the next meeting in Calais on Thursday, January 20, 1949, with guest speakers from St. Johns, N. B.

KARL V. LARSON, M. D.,
Secretary.

New Members

Kennebec

(Admitted October 21, 1948)

Edmund N. Ervin, M. D., 33 College Avenue, Waterville.
Greenleaf H. Lambert, M. D., 326 San Ignacio Drive, El Monte, California.

York

(Admitted October 13, 1948)

Ernest Eppinger, M. D., West Buxton, Maine.



MEMBERS AND GUESTS ATTENDING WASHINGTON COUNTY MEETING, OCTOBER, 1948

Front Row, left to right: Norman E. Cobb, M. D., Calais; John F. Hanson, M. D., Machias; Austin H. Longfellow, M. D., Machias; Forrest B. Ames, M. D., Bangor, President, Maine Medical Association; Willard H. Bunker, M. D., Calais, President, Washington County Medical Society; Karl V. Larson, M. D., East Machias, Secretary, Washington County Medical Society; Richard S. Buker, M. D., Eastport. Back Row, left to right: E. B. Johnston, M. D., St. Stephen, N. B.; Francis G. Benedict, Ph. D., M. D., Machiasport; James W. Crane, M. D., Woodland; Clement S. Dwyer, M. D., Bangor; Oscar F. Larson, M. D., Machias; F. G. Colquhoun, M. D., Eastport; Lloyd Brown, M. D., Bangor; John T. Metcalf, M. D., Calais; E. O. Thomas, M. D., St. Stephen, N. B.; D. F. Bennet, M. D., Lubec; Herbert S. Everett, M. D., St. Stephen, N. B.; Charles W. Capron, M. D., Calais.

NECROLOGY

James Donald Clement, M. D.

1888 - 1948

James Donald Clement, M. D., of Bangor, died July 27, 1948, of a cerebral hemorrhage at the Mt. Desert Island Hospital.

He was born in Belfast, Maine, January 29, 1888, the son of Amos and Mary C. Clement.

He was educated in the Belfast schools, and was a member of the class of 1909 at the University of Maine and was graduated from the Maine Medical School at Brunswick in 1911.

Dr. Clement was in general practice for five years in Portland and Orono, Maine. In 1915, he went to New York to prepare for his speciality at the Manhattan Eye and Ear Infirmary, returning to Bangor where he practiced for thirty years.

His father, a descendant of the first settlers of Seal Harbor, was proprietor of the Seaside Inn there and the establishment was inherited by Dr. Clement who operated it during the summer months.

He also conducted a practice at Seal Harbor.

He was a member of the Penobscot County Medical Association and the Mechanics Lodge, A. F. and A. M., Orono.

Dr. Clement is survived by his wife, the former Charlotte M. Hayden of Raymond, Maine, and two sons, James D. Clement, Jr., M. D., of Bangor, and John H. Clement, now in Oregon.

Dr. Clement was highly esteemed by the Medical Profession and his warm heartedness and kindness will be long remembered by all who knew him.

M. C. MADDAN, M. D.,
President, Penobscot Medical Association.



Edward L. Herlihy, M. D.

1895 - 1948

Whereas, Edward L. Herlihy, M. D., a distinguished physician, an outstanding man, a member of the Council of the Maine Medical Association has passed away suddenly at the full maturity of his powers and ability, and

Whereas, he was aggressive and tenacious for the advancement of medicine and medical science, a sincere and enthusiastic worker for those causes in which he believed, and

Whereas, he was a devoted husband and father,

Now, Therefore Be It Resolved that the Council of the Maine Medical Association grieves at the death of its valu-

able member and recognizes the great loss which the Maine Medical Association has suffered, and

Be It Further Resolved that the Council of the Maine Medical Association does make this public statement of its sense of loss, and directs that a copy of this resolution be sent to his wife and family and spread upon the records of this Association.

FORREST B. AMES, M. D.,
President.

C. HAROLD JAMESON, M. D.,
Council Chairman.

NEWS AND NOTES

Buy and Use TB Seals—They Prevent TB

On Monday, November 22, the 42nd Annual Seal Sale Campaign opens in Maine and the rest of the United States. Soon after this date you will receive a letter with an enclosure of Christmas Seals. Please buy as many as you can, and do read the letter carefully. It tells you some of the things which the Maine Public Health Association and its eighteen affiliated associations did with the money you contributed last year.

This year's Seal is the work of an artist, Barry Bart. Mr. Bart lives in Connecticut, raises dachshunds, and cultivates and landscapes his farm when not painting. In working out the design for this Seal, his inspiration was his small nephew, a tow-headed boy who on Christmas Eve couldn't wait until morning for Santa Claus to come but slipped downstairs in front of the fireplace to wait for him.

Don't just buy these Seals. Use them—on all your mail and on your gift packages. Show that you are supporting the campaign to eradicate TB in Maine and the Nation.

If we reach our quota of \$95,000, we not only can continue our present program for the control of tuberculosis, but can also open up new areas of prevention.

Advisory Committee on Maternal and Child Health and Crippled Children's Services

Appointed by the Chief of the U. S. Children's Bureau, July, 1948, for a 3-year term

Forty spokesmen for the producers and consumers of health services for mothers and children met in Washington, D. C., this week to form an advisory committee to the U. S. Children's Bureau on Federal-State programs for maternal and child health and crippled children's services. The Children's Bureau is a unit in the Social Security Administration, Federal Security Agency.

Invited by the Children's Bureau to advise it on matters of public policy affecting the promotion of better health for mothers and children, this new committee is the first in the child-health field, with representation both of non-professional and professional groups, to be given this broad mandate. Dr. Harry H. Gordon, Professor of Pediatrics, University of Colorado Medical Center, was elected chairman of the Committee for three years.

Raymond B. Allen, M. D., University of Washington, Seattle, Washington

President, University of Washington

Abraham Barhash, M. D., 1790 Broadway, New York, New York

Director, Division on Community Clinics

National Committee for Mental Health

Representing the National Committee

Harriett M. Bartlett, 51 Commonwealth Avenue, Boston 16, Massachusetts

Associate Professor of Social Economy

School of Social Work, Simmons College

W. W. Bauer, M. D., 535 North Dearborn Street, Chicago 10, Illinois

Director, Bureau of Health Education, American Medical Association

Representing the American Medical Association

George Bugbee, 18 East Division Street, Chicago 10, Illinois

Executive Director, American Hospital Association

Representing the American Hospital Association

Allan M. Butler, M. D., Massachusetts General Hospital, Fruit St., Boston 14, Mass.

Professor of Pediatrics, Harvard Medical School

Dean A. Clark, M. D., 425 Avenue of the Americas, New York 11, New York

Director, Health Insurance Plan of Greater New York

Hazel Corbin, R. N., 654 Madison Avenue, New York 21, New York

General Director, Maternity Center Association

Representing the Maternity Center Association

William J. Darby, M. D., Vanderbilt University, Nashville 4, Tennessee

Departments of Medicine and Biochemistry, School of Medicine

Vanderbilt University

M. Edward Davis, M. D., University of Chicago, Chicago, Illinois

Professor of Obstetrics and Gynecology, School of Medicine

University of Chicago

Claudia Durham, R. N., Meharry Medical College, Nashville, Tennessee

Associate Professor of Nursing, Meharry Medical College

Kenneth A. Easlick, D. D. S., University of Michigan, Ann Arbor, Michigan

Professor of Dentistry, School of Dentistry, University of Michigan

Representing the American Dental Association

Nicholson J. Eastman, M. D., The Johns Hopkins Hospital, Baltimore 5, Maryland

Professor of Obstetrics, School of Medicine, The Johns Hopkins University

Mrs. Lulu Evanson, North Dakota Farmers, Union, Jamestown, North Dakota

Director of Education, North Dakota Farmers' Union

Representing the National Farmers' Union

Katharine Faville, R. N., Wayne University, Detroit, Michigan

Dean, College of Nursing, Wayne University

Charles F. Good, M. D., County Health Department, Cleveland, Ohio

Directing Supervisor, Health Service, Board of Education

Harry H. Gordon, M. D., University of Colorado, Denver, Colorado

Professor of Pediatrics, School of Medicine, University of Colorado

William T. Green, M. D., 300 Longwood Avenue, Boston 15, Massachusetts

Orthopaedic Surgeon, Children's Hospital, Boston

Representing the American Academy of Orthopaedic Surgeons

John P. Hubbard, M. D., Children's Hospital, 1740 Bainbridge Street, Philadelphia, Pennsylvania

Director, Committee for the Improvement of Child Health American Academy of Pediatrics

Herbert R. Kobes, M. D., 1105 South Sixth Street, Springfield, Illinois

Director, Division of Services for Crippled Children

University of Illinois

Lawrence J. Linck, 11 South LaSalle Street, Chicago 3, Illinois
Executive Director, The National Society for Crippled Children and Adults
Representing The National Society for Crippled Children and Adults

William Mengert, M. D., 2211 Oaklawn Avenue, Dallas 4, Texas
Professor of Obstetrics and Gynecology, Southwestern Medical College, Dallas
Representing the National Federation of Obstetric-Gynecologic Societies

James Raglan Miller, M. D., 179 Allyn Street, Hartford, Connecticut
Trustee, American Medical Association
Representing the American Medical Association

Oscar L. Miller, M. D., 121 West Seventh Street, Charlotte 2, North Carolina
Orthopaedic Surgeon, The Miller Orthopaedic Clinic

Mary Blanche Moss, 1129 Vermont Avenue, N. W., Washington 5, D. C.
Executive Secretary, The American Association of Medical Social Workers
Representing The American Association of Medical Social Workers

Ewell Newman, 1133 Broadway, New York 10, New York
Social Case Work Consultant, National Urban League
Representing the National Urban League

Harry A. Ong, M. D., 1801 Eye Street, N. W., Washington 6, D. C.
Representing the American Academy of Pediatrics

John Z. Preston, M. D., Tryon, North Carolina
General medical practice

Harry Read, 718 Jackson Place, N. W., Washington 6, D. C.
Executive Assistant to the Secretary-Treasurer
Congress of Industrial Organizations
Representing the Congress of Industrial Organizations

Duncan E. Reid, M. D., 221 Longwood Avenue, Boston 15, Massachusetts
Professor of Obstetrics, Harvard Medical School

Raymond Rich, 330 West 42nd Street, New York 10, New York
Chairman, Raymond Rich Associates

Hugh B. Robins, M. D., Marshall, Michigan
Director, Calhoun County Health Department

Edward S. Rogers, M. D., University of California, Berkeley, California
Dean, School of Public Health, University of California

Thomas E. Shaffer, M. D., Ohio State University, Columbus 10, Ohio
School Physician, The University School, Ohio State University
Representing the American School Health Association

Randel Shake, 777 North Meridian Street, Indianapolis 6, Indiana
Director, National Child Welfare Division, The American Legion
Representing The American Legion

Catherine E. Sheckler, R. N., 5733 University Avenue, Chicago 37, Illinois
Assistant Professor, Nursing Education, University of Chicago
Representing American Nurses' Association

Mrs. Edith Hyslop Sherrard, 1634 Eye Street, N. W., Washington, D. C.
Social Studies Associate, American Association of University Women
Representing the American Association of University Women

Nathan Sinai, D. P. H., University of Michigan, Ann Arbor, Michigan
Professor of Public Health, School of Public Health
University of Michigan

Ernest Stebbins, M. D., The Johns Hopkins University, Baltimore, Maryland
Director, School of Hygiene and Public Health
The Johns Hopkins University

Florence C. Thorne, 901 Massachusetts Avenue, N. W., Washington, D. C.
Director of Research, American Federation of Labor
Representing the American Federation of Labor

Felix J. Underwood, M. D., Jackson 113, Mississippi
Executive Officer, Mississippi State Board of Health

Abram L. Van Horn, M. D., 744 Broad Street Newark, New Jersey
Medical Director, Kate Macy Ladd Fund
Representing the American Public Health Association

R. M. Walls, D. D. S., Bethlehem, Pennsylvania
Dental practitioner

Mrs. Roy C. F. Weagly, Rural Route No. 1, Hagerstown, Maryland
President, Associated Women, American Farm Bureau Federation
Representing the American Farm Bureau Federation

Barbara White, 1790 Broadway, New York 19, New York
Educational Secretary, The American Physiotherapy Association
Representing The American Physiotherapy Association

James L. Wilson, M. D., University of Michigan, Ann Arbor, Michigan
Professor, Department of Pediatrics and Communicable Diseases
School of Medicine, University of Michigan

Mrs. Eva Ylvisaker, Children's Hospital, Cincinnati 29, Ohio
Chief Dietitian, Children's Hospital
Representing The American Dietetic Association

Members representing the National Congress of Parents and Teachers, and the General Federation of Women's Clubs have not yet been appointed.

Maine Psychiatric Association

The annual meeting of the Maine Psychiatric Association was held at Pownal State School, Pownal, Maine, Thursday, October 21, 1948.

The following officers were elected for the coming year:
President, Frederick R. Carter, M. D., Portland.
Vice President, Francis S. Sleeper, M. D., Augusta.
Secretary-Treasurer, N. S. Kupelian, M. D., Pownal.

The guest speaker, William B. Scoville, Chief of the Neuro-Surgical Department, Hartford Hospital, Hartford, Connecticut, gave a very interesting paper on "Lobotomy," which was followed by a great deal of discussion.

Clinico-Pathological Exercise—Continued from page 320

cells are swollen. There are no sharply defined areas of infarction. Sections of pons at the level of the sixth nucleus reveal recent small hemorrhages in the superior cerebellar peduncle.

The large and medium-sized arteries reveal evidence of marked atherosclerotic change. The superior anterior cerebellar arteries are severely involved with extensive lipoid deposition in the intima. The changes in the larger arteries are atherosclerotic and are quite different from the hyalinization of the arterioles which is characteristic of the lesion associated with hypertensive arteriopathy.

This picture should be distinguished from hypertensive cerebral swelling which Scheinker³ has introduced as a characteristic clinico-pathologic syndrome characterized clinically by severe headache, drowsiness, confusion, restlessness and delirium accompanied by signs of increased intracranial pressure and occasionally by convulsions. Pathologically the brain shows marked cerebral swelling with flattening of the gyri and narrowing of the sulci. The lateral ventricles are usually compressed and there is a general narrowing of the cortical gray matter. Histo-

logically one sees swelling of the nerve fibers, myelin sheaths, and glia, congestion and stasis of small veins and capillaries, degenerative changes in the venous endothelium, and the arteriolar changes found in hypertensive arteriopathy.

Dr. Wadsworth's Diagnoses:

Hypertensive cardiovascular renal disease with hypertensive arteriopathy associated with focal areas of cerebral edema and perivenous hemorrhages.

Coronary atherosclerosis.

Benign nephrosclerosis.

Left ventricular hypertrophy.

Terminal bronchopneumonia.

REFERENCES

- (1) Oppenheimer, B. S., and Fishberg, A. M.: Hypertensive encephalopathy. *Arch. Int. Med.*, 41, 264, 1928.
- (2) Scheinker, I. M.: Hypertensive disease of the Brain. *Arch. Path.*, 36, 289, 1943.
- (3) Scheinker, I. M.: Hypertensive Cerebral Swelling, a characteristic clinico-pathologic syndrome. *Ann. Int. Med.*, 28, 630, 1948.

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Proceedings

NINETY - FOURTH ANNUAL SESSION

Maine Medical Association

House of Delegates

and

General Assembly

POLAND SPRING, MAINE

June 20, 21, 22, 1948

(Continued from the October issue, page 301)

GENERAL ASSEMBLY MEETING — JUNE 21, 1948

The General Assembly Meeting of the Maine Medical Association convened at the Poland Spring House, Poland Spring, Maine, at 4:30 o'clock in the afternoon, with President Stephen A. Cobb presiding.

PRESIDENT COBB: The meeting will please come to order. This is a meeting of the General Assembly for the election of a new President. I await any nominations from the floor at this time.

DR. MERRILL S. F. GREENE of Androscoggin County: Mr. President, it is my distinct honor and privilege, on behalf of the Androscoggin County Medical Association, to place in nomination for the office of President-Elect the name of Dr. Ralph A. Goodwin of Auburn.

Dr. Goodwin is a modest man, and the remarks that I make will be modest in character. I have known Dr. Goodwin for twenty-five years. He has practiced in Auburn for thirty-five years. He has been a member of the Surgical Staff of the Central Maine General Hospital since 1924. Not only is he a skillful surgeon, but he represents the best qualifications of the general practitioner.

He is a graduate of Bates College and of Harvard Medical School.

I am sure that most of you know Dr. Goodwin. He is a man of the utmost integrity, and, as I have said, he is a skillful surgeon, and at all times a gentleman and a sympathetic practitioner. He has been President of his County Society, President of our Hospital Staff, and he is, this year, retiring as Chairman of the Council of this Society.

In closing, I should like, also, to mention that Mrs. Goodwin is a very charming and attractive woman!

In honoring Dr. Goodwin, this Society would be carrying out the very fine tradition of choosing a man of the highest integrity, and a man who is a great credit to our profession! [Applause]

DR. CARL E. RICHARDS of York County: Mr. President, I should like to second the nomination of Dr. Ralph Goodwin. As the representative from York County, we feel that Androscoggin County has not had a President for eighteen years, and they now deserve a President. In addition, in my association with him on the Council, I find that he is a high type of man and I think that he will make a very fine President of this Association. [Applause]

DR. P. L. B. EBBETT of Houlton: I have known Dr. Goodwin for a number of years, and I want to say, on behalf of Aroostook County, that I should like to second his nomination for the Presidency of this Association. [Applause]

DR. FRANK SMITH: As a Delegate from Cumberland County, it is a pleasure to second the nomination of Dr. Ralph A. Goodwin as President-Elect, because we have wanted a good man from Lewiston for sometime! [Applause]

A MEMBER: I move that nominations be closed, and that the Secretary cast one ballot for the election of Dr. Ralph A. Goodwin as President-Elect of this Association.

This motion was duly seconded and was unanimously carried.

PRESIDENT COBB: The Secretary having cast the ballot, I declare Dr. Ralph A. Goodwin of Auburn and Androscoggin County duly elected as President-Elect of this Association.

Dr. Goodwin, we should like to have a few words from you at this time! [Applause]

PRESIDENT-ELECT GOODWIN: Mr. President and members of the Maine Medical Association. I am very glad of this opportunity to thank you for the honor that you have conferred upon me, the highest honor that you could confer upon any member of this Association.

I also appreciate the fact that there is a very heavy responsibility that goes with this office, but I feel that with your coöperation, when I go into office, if I can continue the progress of the work that has been done this year by Dr. Cobb, and the work that I know will be done next year under Dr. Ames, I feel that the program will be a success.

I am deeply grateful for this honor that you have conferred upon me. Thank you all very much. [Applause]

PRESIDENT COBB: Is there anything else to come before the General Assembly?

If not, I declare this General Assembly adjourned, and there will be a five-minute recess; immediately thereafter the Second Meeting of the House of Delegates will begin.

[Whereupon, the General Assembly meeting was adjourned at 4:50 o'clock in the afternoon.]

SECOND MEETING OF HOUSE OF DELEGATES— JUNE 21, 1948

The Second Meeting of the House of Delegates of the Maine Medical Association convened at 4:50 o'clock in the afternoon, at the Poland Spring House, Poland Spring, Maine, on June 21, 1948, with Forrest B. Ames, M. D., presiding.

CHAIRMAN AMES: The Second Meeting of the House of Delegates will please come to order. The first order of business is the roll call.

[The roll was then called by the Secretary.]

CHAIRMAN AMES: I am informed by our Secretary that we have 31 delegates present out of our 35, so that gives us a fine attendance today, as well as yesterday. A quorum is only 10. So I will declare this Session is in order, and will proceed to the business at hand.

The first item of business this afternoon is to hear the report of the Nominating Committee, which was set up yesterday, in accordance with our by-laws. This report of the Nominating Committee will be given to you by Dr. James H. Crowe of Ellsworth.

[Dr. Crowe then read the report of the Nominating Committee which was published in the July issue of the JOURNAL, page 206.]

CHAIRMAN AMES: You have before you, now, the report of the Nominating Committee.

DR. FRANCIS A. WINCHENBACH of Bath: I move that the Secretary cast one ballot for the election of the members of the Standing Committees as submitted in the report of the Nominating Committee.

This motion was duly seconded and was carried.

CHAIRMAN AMES: The Secretary has cast the ballot, and the men whose names have been read I declare duly elected as members of the Standing Committees.

The matter of the Legislative Committee, as you know was omitted temporarily, and further action by this body may take care of that, before the meeting is over, so that we will have a proper committee set up and functioning for the coming year.

The next item of business is to hear the report of the Reference Committee. There were referred to this Committee several matters by this House of Delegates yesterday afternoon, and I am now going to call upon Dr. Foster C. Small of Belfast to give the report of the Reference Committee.

DR. SMALL: Mr. President and Members of the House of Delegates and Members of the Maine Medical Association. Yesterday, for the information of those who were perhaps not present, the Chair appointed Delbert M. Stewart, Lawrence M. Cutler, P. L. B. Ebbett, Harold E. Small and Frank A. Smith to this Reference Committee.

We had four problems which were brought to our attention. Most of you were present yesterday and heard the discussions relative to these propositions.

The first one presented for our consideration was that a Committee be appointed to work with the Executive Committee to bring the Constitution and By-laws up-to-date. That has our hearty cooperation and unanimous vote that that be done, and we recommend that to the House of Delegates at this time.

The second thing is that the Women's Auxiliary to the Maine Medical Association be approved.

This was unanimously approved by the Committee.

The third problem presented for our consideration is the nursing shortage. You are all familiar with that, and you probably heard the discussion Dr. Swett gave us yesterday. Without any question of a doubt, that is a serious problem in this State, and particularly in the smaller communities, like where I come from, which is Belfast.

We believe that the plan he told about should be adopted, and we have the unanimous vote, with the following motion to be presented for action by this House of Delegates:

The Reference Committee of the House of Delegates of the Maine Medical Association moves:

1. That consideration of the proposed plan for State-wide relief of the nursing shortage in the State of Maine be given;

2. That this Committee recommend the official approval of the plan by the House of Delegates in behalf of the Maine Medical Association;

3. That this Committee recommend that the Executive Secretary, W. Mayo Payson be authorized to serve on the State Planning Committee as representative of the Maine Medical Association.

I might say that this is the copy submitted to us for action by Dr. Swett. So that I assure it will meet with his approval, and I pass that over to you.

The next problem which we had for consideration is that of prepaid medical care. I am not saying that too quickly, for I feel that that is a problem, in any event. I feel that it is a question that is open for debate, of course, as to some phases of it.

However, let us go back for a few sessions of previous medical meetings assembled here and other places. First,

there seems to be a need for some sort of legislation relative to insurance. If that had not been the case, the previous House of Delegates would not have authorized a Committee to be appointed and to go to the Legislature for an enabling act, to promote that phase of our work in the Maine Medical Association. That Committee, which I wish to read to you at this time to refresh your memory, consisted of Dr. Eugene H. Drake of Portland, as Chairman, Edward H. Herlihy of Bangor, Clyde I. Swett of Island Falls, George Cummings of Portland, Frank Smith of Westbrook and M. Tieche Shelton of Augusta. These men have made an intensive study of this proposition. They are leaders in our profession in the State, and they realize that it is necessary for us to have some sort of prepaid medical insurance.

You have all received a copy of the contract submitted to you for study and examination of the contents and the virtues of the things as they are presented.

There is no question of a doubt but that there is, again, a question of some debate and argument on some of these propositions.

I want to state that the Committee has had very little opposition presented to us against this measure. However, in all fairness to the opposition that has been presented to this Committee, I think it is fair to tell you some of the things that have been called to our attention, and which may be open for debate, and which may be easily and quickly settled by Dr. Drake or other members of the Committee.

The first thing brought to the attention of the Committee was that there was no need of any insurance laws, and that that was not necessary. Now, this is, apparently, contrary to what the previous sessions of the Maine Medical Association have thought relative to this matter.

The second thing was that it encourages socialized medicine, instead of discouraging socialized medicine.

The third thing was that it is somewhat dictatorial.

Now, I want to digress here just for a moment, to bring this to your attention. We have gone over that very thoroughly, and the only phase of it that might be considered, perhaps, dictatorial is that part of the contract wherein the doctor may charge more than the patient thinks he ought to charge, and the Committee on the proposition may say that the doctor has charged too much and that he should refund some money. Perhaps that might be a little dictatorial; but, again, I think that this Committee has stated publicly to all of us that this is not perfect and that that can, perhaps, be settled by using the proposition and seeing how it works.

Now, another objection is that it is not applicable to the various regional sections of the State, and that instead of a \$2,000 or \$3,000 minimum, it should be \$3,000 to \$4,000 minimum, to come under this Act.

That is, perhaps, debatable.

I think in our section of the country, that would not, perhaps, benefit us a whole lot, whereas in the industrial centers and other places, it probably would.

Another reason that was promoted against it was that we are scared of socialized medicine.

Well, I do not think that we, as an organization, are scared of it. We are not the type of men who are scared. We would never have gone into the medical profession in the first place, if we were scared! So that I don't think we are being scared, as practitioners of medicine in the State of Maine, and I think we are intensely interested in what will be best for the patient and best for us in the long run, and I think the patient comes first with all of us.

Another thing is that it will promote the financial status of the insurance company and its agents, and will not benefit the medical profession.

Of course, it will increase their business to some degree; but, they already have insurance policies, which it is stated they can use, if they so desire. That is true. But, it is not sponsored by the Maine Medical Association.

Another thing brought up shortly before this session was that it was impossible to determine the salaries of these various people who come to our offices for treatment.

I think that probably Dr. Drake can answer that question easier than I can.

But, the whole thing sums up to the fact that if we, as an organization, want control of any insurance plan, we certainly have submitted to us at the present time the only tangible thing we can hold, as an organization. It is not compulsory on the part of any physician or surgeon to enter into that contract; neither is it with the patient. Therefore, there is no destruction of the patient-and-doctor relationship.

I would say right here that in analyzing this proposition, each member, nevertheless, has undoubtedly been instructed as to how they should vote on this proposition.

We had a session last night and another one this morning, and we disregarded our personal feelings and the society's as a whole, and analyzed this thing on the virtues of what it really meant to the patients and the physicians of the State of Maine.

The Committee unanimously approved it, and it recommends to you the adoption of this proposition as a trial, at least, for one year, in order to see what can be done to help us in these troublous times.

To be sure, we are threatened and perhaps we ought to be scared. But, the insidious undermining in the various groups that would destroy the practices of medicine as to what we know it to be today, may give us an uncoated tablet, and, whether we like it or not, the prescription will be there; it will be prescribed by the government and you are to take it, and if you don't like it, all right, you swallow it.

Thank you for your attention to our Committee report.

[Applause]

CHAIRMAN AMES: Thank you, Dr. Small. There will be full opportunity for discussion. In the meantime, I will declare the report of the Reference Committee approved and placed on file, and continue with other business, until we have reached the point for discussion.

At this time, I know that Dr. Cobb wants to introduce some guests to you.

PRESIDENT COBB: I put over the introduction of visiting delegates from the other New England States until this time, hoping that some of them might come in and possibly take part in this meeting. Is the delegate here from New Hampshire? Vermont? Connecticut? Rhode Island?

DR. LEACH of Rhode Island: One of the pleasant things about being a delegate to this Society is that the tradition of sending delegates from one of the New England Medical Societies to the other is so enshrouded in antiquity that any duties which they may have had in the past, including that of making speeches, has long been forgotten. I do want to say what a great pleasure it is to come to this particular meeting. It is a pleasure because your scientific sessions are very practicable, and also because you never seem to see any "stuffed shirts" at the Maine Medical Association meetings. There is that atmosphere of friendly informality, which is lacking in a good many of the medical conventions.

It is also a particular pleasure for me, because I was born in Winthrop, and because my father was a Methodist Minister, I lived in a number of different parts of this State as a boy, and graduated from Kents Hill. I have a brother living in Kennebunk. I, myself, maintain a very modest summer home at Kennebunk Beach.

I do want to express again my pleasure in bringing to you the greetings of the Rhode Island Medical Society. And thank you very much! [Applause]

PRESIDENT COBB: I have purposely left to the last the perennial delegate from Massachusetts, who is also a Maine boy from Gardiner. He went to Massachusetts, and he is now one of the "Big-Wigs" so to speak, in their medical set-up and in the things they are putting over.

I take great pleasure in introducing to you the delegate from Massachusetts, Harold Giddings! [Applause]

DR. HAROLD GIDDINGS: Mr. President, Ladies and Gentlemen. It gives me a very great pleasure to be able to come to you and to bring the message of good-will from the Massachusetts Medical Society, for after all, the same blood

flows in the veins of the two societies. I am sure, after hearing the talk this afternoon by Dr. Porter and also the talk by Mr. McLaughlin, that that blood could be proved scientifically!

You will recall that up to 1820, Maine was an integral part of the Commonwealth of Massachusetts. At that time, it broke away and became a separate entity. But, long before that, the Massachusetts Medical Society had been founded and Maine had had a very important part in the formation and development of that society.

The Massachusetts Medical Society was formed in 1781. It was the first medical society of the country. It was antedated by a local society known as the Boston Medical Society, which had been in existence but a very short time.

Now, among the thirty-one incorporators of the Massachusetts Medical Society, we find the name of "Shirley Irving" and his residence was given as Portland, Maine. At the time of the incorporation of the Massachusetts Medical Society, he was twenty-two years old. He was the son of a graduate of Harvard College in the class of 1781, and his mother was the daughter of a former Governor Shirley of the Commonwealth of Massachusetts.

Dr. Shirley Irving received an honorary degree in Medicine from Harvard in 1810. Following the incorporation of the Massachusetts Medical Society, his name appears from time to time as having been in attendance at meetings. The attendance, of course, was not large in those days. Dr. Irving also seems to have shuttled back and forth between Portland and Boston, because in the annual catalogs of the Massachusetts Medical Society, we find Dr. Shirley's name on several occasions, as registered from Portland, and on others as registered from Boston, but, as I said before, in the original articles of incorporation, he was included as coming from Portland.

Dr. Irving was subsequently made Librarian of the State Society, but resigned after a few months' service, because of ill health, and he died in Boston in 1813.

Incidentally, he was buried from Trinity Church, where he was baptized.

Now, we find Dr. Irving taking part in other activities. For example, in 1785, four years, after the founding of the Society, Massachusetts was divided for the purposes of districts, into four districts, and one of those districts comprised the Counties of York, Lincoln and Cumberland. These corresponding committees were supposed to report what went on in their particular districts, to report any cases of interest, and to do whatever they could to cause the medical profession to advance.

There was not very much interest in these communications committees at first, but in 1790, five years after being set-up, we find the beginning of the communications of the medical society, and we find the beginning of the publication of those communications, and those publications have continued down to the present time.

Again, in 1803, there was an attempt to divide the Commonwealth into four districts, to be known as the Southern, Western, Eastern and Northern Districts of Maine. This, however, was not successful. Here, again, the doctor's name appeared.

We find the next year, in 1804, according to the records of the Massachusetts Medical Society, a petition was granted by the Council of that Society to establish a district society in Lincoln and Cumberland Counties, to be known as the District Maine Medical. Among the signers were Nathaniel Coffin, Shirley Irving, M. I. Mitchell and David Jones.

The thought came to me, could this Mitchell be a forebear of Dr. Alfred Mitchell, the beloved dean of so many years of the Maine Medical School? I don't know.

The Massachusetts Medical Society did very little, really, in the establishment of districts until 1850. In 1804, and 1805, three districts were established; that is, Suffolk, Worcester and Essex South. The real establishment or division of Massachusetts into Districts occurred about 1850, at which time the present eighteen districts were set-up. It is interesting to note that the present Maine Medical Association

became active only three years later, in 1853. It is also interesting to note that in 1821, that is, a year after Maine was set up as a State, there was an annual meeting, the first annual meeting of the so-called Maine Medical Society, held in Portland. The first Legislature met in May, 1820, and the following winter the members of the Massachusetts Medical Society residing in Maine, met in Portland, which was then the seat of government, and commenced the foundation of a State Medical Society. The President of that Society was Dr. Nathaniel Coffin of Portland. The Society was incorporated in 1821. The first annual meeting was held in September, 1821, at Massachusetts Hall in Brunswick. It was proposed at that time that the faculty of Bowdoin College and the members of the Massachusetts Medical Society should appoint a committee of three to examine graduates in Medicine, to determine whether or not they were qualified to practice.

We find nothing further about that society, and the only mention made of it is in a very interesting and exhaustive report published in 1834, of the proceedings of that society.

That, so far as I have been able to find, was the only report published of that society, and nothing further was done until 1853, when the present Association was formed.

There are many more highlights of many important matters of interest, but I am not here to make a speech. However, I was so very much interested in the Maine Medical Association because, as the previous speaker said, having come from Maine, my father was a President, previously, of this Association, I have a very great interest into, and that prompted me to look up this bit of material.

Thank you very much, and I am very happy to be here. [Applause]

PRESIDENT COBB: I am sure it is a pleasure for us to welcome our colleagues from our sister states, and we are very glad you have come here to be with us. [Applause]

CHAIRMAN AMES: From our meeting yesterday, two committee reports were not presented; one of those was the Committee on Rural Health, and I am going to ask Dr. Nickerson to present his report at this time. [Applause]

DR. NICKERSON: Mr. President and Members of the House of Delegates. There is a report prepared, but unfortunately that report is at home. It is of no help to you here to have the report at home, but I shall do the best I can to summarize a few things.

We had one meeting of the Committee on Rural Health in Waterville, in January. We asked Mayo Payson to meet with us at that meeting, because he had attended the meeting of the National Rural Health Committee the previous year, and we felt that he would know what was being taken up, on a national basis.

We met there, and Dr. Swett came over, and also Dr. Herlihy, plus the members of the Committee.

Mr. Payson and I attended the meeting of the National Rural Health Committee in Chicago, and it impressed me that the needs of the country-at-large in the rural areas, especially probably in the south, were much greater than they are in the State of Maine.

There have been two county surveys made; one in Aroostook County and one in Piscataquis County. At these meetings, various problems were presented by local health officers, members of Parent-Teachers' Associations, and various organizations. From these two meetings, it was the opinion of the Committee that a study of the Public Health Laws of this State, with particular attention to local public health set-ups, should be undertaken.

My written report will be turned in to the Association after I get back home. [Applause]

CHAIRMAN AMES: If there are no comments, I will declare this report approved.

Yesterday, our Executive Secretary, Mayo Payson, was in Chicago; today he is with us, and he is going to give us his report of his last year's activities, and some suggestions which he has for our future work. Mr. Payson! [Applause]

MR. MAYO PAYSON: Mr. President, Delegates and mem-

bers of the Maine Medical Association. If I am somewhat bleary-eyed today, it is not because I was here last night sitting up with a sick doctor-friend; it is because Saturday night, I was on the train to Chicago, and last night I was on the train back to Portland, and got in at three o'clock, which I understand is the exact time some other people got to bed.

I shall now read the dry bones of what I did last year.

In the first part of my report I shall mention briefly the different activities in which I have engaged during the past year. Such a report is, of course, bound to be too long, too dull, and it will sound too egotistical with its repetition of "I did this, that or the other."

In September, 1947, I attended a meeting of the National Physicians' Committee in Chicago. Your official representatives were Drs. Vickers and Winchenbach, and they will undoubtedly report the meeting fully. I was, however, afforded an opportunity to hear the arguments against the Wagner-Murray-Dingell Bill and the method of attack of this organization against socialized medicine.

In February, 1948, I attended the Third Rural Health Conference, also held in Chicago. There was a well-planned program pertaining to health in rural schools. Dr. Norman H. Nickerson, Chairman of your Rural Health Committee, attended and I understand that he has reported on this Conference.

In November, 1947, I attended a meeting of the Secretaries and Editors in Chicago and obtained considerable information as to things being done over the country by those officers.

This year I have finished the round begun last year of visiting every County Society. Some Societies have even allowed me to come back for a second visit.

With the County Societies I have discussed chiefly two subjects. The lack of unity or agreement among the doctors themselves with regard to the two measures sponsored in the last Legislature was to some extent responsible for the defeat of both. Legislators returning to Augusta after weekends at home, reported many of their own doctors indifferent to or opposed to the bills. In order to have an effective legislative program it is absolutely necessary to have the active interest and desire for that program among the great majority of the doctors.

More recently the Societies have asked me to discuss the voluntary prepayment insurance plan. At the request of the Committee, I worked with them in the preparation and drafting of the plan and report submitted, and was, therefore, in a position to explain the plan with reasonable accuracy. Without regard to what final disposition the House of Delegates makes of this matter, a complete exposition of the arguments for and against has been had which means that the members are far better informed on the subject than they were when an enabling act was asked of the Legislature.

I have spoken to several service clubs, pointing out the arguments against the Wagner-Murray-Dingell Bill and the folly of hoping to bring about either complete or high quality medical care through legislative fiat.

The Greater Portland Dental Society invited me to speak to them on health insurance, and, in studying the subject, I was surprised to find historical background in this Country as far back as 1910.

The Maine State Employees' Association asked me to explain the prepayment plan to them. I found there, and among other lay groups, a great deal of interest and desire for some such plan.

The Council of the Maine Medical Association authorized a survey at the County level of the medical services available, with particular attention to rural areas. In this case it seemed to me to be desirable to make the survey as complete as possible by including a very necessary adjunct to medical services; viz: hospital facilities. Since Dr. Fisher, Director of the State Bureau of Health, was engaged in a survey under the Hill-Burton Act, to determine existing facilities and a proposed integrated hospital program, I

awaited the completion of that survey before undertaking the county survey authorized by the Council.

In the meantime it was necessary for this office to collect accurate data as to doctors and locations in this State. Your Secretary's office, of course, has accurate information on your membership but for the purposes of the survey that was not sufficient. The County Secretaries will undoubtedly testify that they have been constantly bothered by this office to obtain full information.

Such information has been obtained with considerable detail as to the ages and specialties of the doctors. Two county surveys have been made; one in Aroostook and one in Piscataquis. The Committee on Rural Health will report on these surveys and their results. One result that I can report here is that we found six towns in Aroostook which are not now supplied and which could amply support doctors. This information was not available to this office before the survey.

The method used in the survey was one felt to be calculated to create good public relations for the doctors. Letters were sent out by the County Secretary to representatives of the Grange, Parent-Teacher Associations, Health Councils, Chambers of Commerce, Hospital Administrative Boards, and other interested lay groups, inviting them to sit down in a meeting with officers of the County Society and discuss health matters in their area. As much of the clerical work as possible was done in this office. The two meetings held have produced some pretty frank discussions of local problems and notable friendliness toward the doctors attending.

During the past year I have also been able to work with the Committee on Prepayment Medical Care, and this office, of course, mimeographed and distributed the report of that Committee to every member doctor in the State.

The Committee on Rural Health has been very coöperative, and I have discussed with it the results of the two county surveys, which, to some extent, form the basis of their report.

Now, if I may throw away the script and talk with you. A year ago, last June, I was bewildered. When I was in the Legislature my second term, I formed the Bewildered Club, which was open to members of the House only. We wouldn't let the Senators in. But, any member of the House who wanted to join my Bewildered Club was permitted to do so, provided he felt he was bewildered. I had practically one hundred per cent membership.

A year ago June, I wanted to start another Bewildered Club. I was eligible; there was no doubt about that. But, I couldn't find any of the Association members who could join me in the Club.

There were two schools of thought, very definitely; one was that you didn't need an Executive Secretary at all, and the other was that if you had to have one, it shouldn't be Mayo Payson.

So I had to give up the idea of that.

I had an idea, when I entered on the job, that the Maine Medical Association probably had some ideas of its own, as to what it wanted done. I will admit that Dr. Forrest Ames didn't mislead me in that regard; he said we would have to work it out as we went along. But, you will remember that the Legislative Session came up immediately after I took office, and you had a definite, clear-cut program there. That sort of lulled me into a sense of security, that there would be other work coming along.

I woke up the last of July, and found that I hadn't anything to do, and I hadn't done a thing for two months. I began to start thinking that I couldn't sit around here all the time, for I'd rot and die.

Well, we had an inquiry come into the office from a doctor out of the State, who wanted to settle in Maine. We looked at our records, and we didn't have a place in the State of Maine listed as needing a doctor. That seemed to be a ridiculous situation, for there are plenty of places in Maine where doctors are needed. So that from that small beginning, I thought up the idea of having a county survey,

and I went to the Council and asked them if they would authorize a survey at the County level of the medical facilities, and they did authorize it. Then, the idea expanded. After all, we wanted better public relations through the State. We wanted to be able to get some things done. It seemed to me that that was a vehicle for good public relations right there.

Then, I sat down and I started to analyze it. What did the the Maine Medical Association want of me or of any Executive Secretary, better or worse? It was perfectly simple, when you came right down to it. You don't want somebody to get you more business, to make more money. You have to pay too much of what you make now to the government in income taxes. Certainly, a layman is not qualified in telling you how to make more money. You didn't need an Executive Secretary to improve the type of medical care you are giving.

So you must have had two objects in mind.

At the national level, you wanted to combat socialized medicine.

At the local level, you wanted to resume the leadership which naturally and rightfully belongs to the doctors in legislation pertaining to health matters.

Those two things could, then, boil down to those two propositions, and it was then simple to see what your problem was.

So, going back to the County Health Survey, it seemed to me that if we could get the doctors who are officers of the County societies to sit down with groups of laymen and discuss their problems, you would have good public relations right there to start with. The doctors are too busy today to run for political office; the people think they are too busy to take much interest in community affairs.

The doctors have given the impression that they are aloof from what goes on in the rest of the community. I don't think they are, and I know that in Piscataquis and Aroostook Counties, I had splendid assistance and a splendid turnout of doctors to sit down and talk. Now, that is good, grass-roots politics, because those people are influential and helpful in the communities. The doctors have shown interest in their problems, and from the statement of their problems, the Rural Health Committee has drawn a proposition for study of legislation. You are doing something if you take up that program, to help in carrying out the very proposition which these people have suggested.

For the coming year, I hope that you will continue this Rural Health Conference, and the County Surveys, until every one has been completed, and I hope that after each county has completed its survey, some organization of a permanent nature, possibly a county health society, maybe a county health council, so that this work may go on, so that the doctor at the county level may assume a part in the health affairs of his county and help build up the necessary foundation for leadership in health matters in the county and the State again.

Now, I believe that the Rural Health Committee is perfectly sound in saying that the public health laws of the State of Maine should be revised. All of the complaints made by the lay people in the county center about the lack of proper care for the disposal of garbage, collection of rubbish, disposal of sewage, all of those problems are problems that come down to your local public health units. I don't know when the public health laws of the State of Maine were re-written, but it must have been a terrifically long time ago.

There is a proposition where the Maine Medical Association may well give consideration to something absolutely altruistic for the benefit of the people, and taking the leadership of it.

Although I suppose there is no bill pending in Congress right now, but there was pending, the Saltonstall Bill, proposing to appropriate Federal money, through the states, to build up a local public health program.

There are only four places in the State of Maine today

that could have taken advantage of that program, if it had gone through.

A study and a careful survey of the public health laws of Maine will put the State of Maine in a position to improve its own situation and to be able to take advantage of public funds when the opportunity comes.

Now, I should like to say in that connection that I have found Dr. Fisher, the head of your State Bureau of Health, most coöperative and helpful, and his superior, the Commissioner of Health and Welfare, also most coöperative and helpful. So that if the survey is authorized, and if I am authorized to do the legal work on it, I shall certainly ask their help and coöperation in everything that takes place.

If such a survey is to be made, I am not a doctor, and I have got to have somebody to evaluate the proposition and to see it through the eyes of the doctors, who understand health matters. Therefore, I suggest to you that we have a new Legislative Committee. The present Legislative Committee is made up of the President, the President-elect, and Dr. Carter. There aren't three finer and more amiable and capable gentlemen in your whole Association and there aren't three members of your Association that have anywhere nearly the burden of official work that is carried by these three men. I would be ashamed to have to take up the problems that I would have to take up with them on this survey.

I would suggest to you that your by-laws be amended to set up a Committee of five, and I mean a Committee that will work, and let me do the necessary research on the law, because I am experienced in that end of it, having done it for a great many years; but, I will have that Committee to guide and direct me.

Furthermore, a Legislative Committee might very well be the committee you would want to do a review of your by-laws and Constitution. I can assure you that they need a review very badly.

Let me suggest this to you. Six delegates here can change the by-laws governing 730 odd members of the Maine Medical Association. Now, don't think that I am implying that any doctors would want to come in here and pull a sly trick. But, assuming that six delegates were here one day and something had come up which incited their wrath and anxiety, and they proposed an amendment to the by-laws on Sunday, and acted upon it on Monday, six is a majority of ten, and ten constitute a quorum. I submit to you that your by-laws can be made altogether too easily amended, and without the knowledge and the consent of the vast majority of your members.

And so I would urge that you set up a Legislative Committee to study legislation proposed, to study legislation between sessions of the Legislature, and to let your Executive Secretary have them to confer with on every bill that affects health coming before the Legislature. [Applause]

I would like to propose one more proposition to you. I would like to propose a zealous and an active Public Relations Committee. I have taken this matter up with the Chairman of the present Public Relations Committee, and he agrees with me entirely. I should like to have a Public Relations Committee, so that we can bring to the attention of the members of the Maine Medical Association all the things that are going on in Washington that you need to know about; the things that the A. M. A. is sponsoring, and undertaking that you need to know about; the things the

different States are doing, as they try to work out their public relations work that you ought to know about.

All of those things are very, very necessary to the Maine Medical Association, if it is going to do any of its part at the national level.

It is perfectly obvious that 1,000 doctors in the State of Maine aren't going to have very much influence on national legislation. But, when 1,000 doctors in the State of Maine and the 170,000 odd doctors in this Association get together on a plan and keep abreast of each other and work together, then you can really have some effect on national legislation.

I propose to you that you have an active and zealous Public Relations Committee, to keep you abreast of what is going on all over the country.

I should also like to speak for a moment on the matter of another Speakers' Bureau. I should like to see a Speakers' Bureau of Doctors, who are willing to prepare themselves and be willing to speak, even to lay groups or county societies on your economic and social problems that are facing the doctors of this country.

QUESTION: How about the Veterans?

MR. PAYSON: I haven't included that, because this is a matter for the doctors. Neither have I mentioned the medical school proposition, which is in the capable hands of Dr. Herlihy. I have nothing to do with that, of course, except any office work that I can do to help the situation along.

On prepayment medical care plans, I don't know; I am not going to say anything to influence anyone in voting on that proposition. It interests me to this extent. If the prepayment plan is passed, you will have to set up a Health Insurance Committee. I believe, as a lawyer with some experience in that work, that I can relieve the Committee of a great deal of the detail.

I give these things to you as an integrated program for Public Relations and Legislative Work for the year, and I hope this will meet with your approval.

I am not in the habit of saying things that I don't mean. I find it a little difficult to do these proper "Thank you" things, but by golly, I can't help saying that I have appreciated some of the help and support that I have had this year. You take Steve Cobb, and you put a proposition up to him, and ask him what about it, and he will say: "Okay, go ahead, and I'll stand by you." He not only says that, but he does stand by you.

Then I turn to Forrest Ames, and he gives me good help—he helped to hire me; he's got to!

And Fred Carter, the most pleasant fellow associate and worker in the office.

I want to thank the members of the Council and the members of the Maine Medical Association who have helped me out of some of the bewilderment that I felt a year ago. [Applause]

CHAIRMAN AMES: Thank you, Mayo. I have watched with considerable interest and initial concern, which has now passed away, the growth of our efforts, from a nebulous nothing to a concrete program which has been presented to you. I feel that we have gone quite a way in the last year and a half in organizing the potential powers of our organization.

I will declare this report accepted for the records.

(To be continued in the December issue)

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BORIC ACID — POISON*

ALBERT W. FELLOWS, M. D., JAMES S. CAMPBELL, M. D., RICHARD C. WADSWORTH, M. D.

When a drug which has enjoyed the reputation of being mild but harmless can be shown to be both ineffective and dangerous, that drug should be eliminated from use. Boric acid is such a drug.

Boric acid was first prepared by Wilhelm Homberg (1652-1715)¹ by the action of mineral acids on borax. Since then it has been widely used as an antipruritic, a dusting powder, as a mild antiseptic in poultices, eye lotions, vaginal douches, irrigating solutions for the bladder and empyema cavities, in dressings for burns and as a preservative for foods. A widely accepted impression of this drug was expressed in a publication of the American Medical Association in 1926. "The best example of a bacteriostatic lotion is a saturated solution of boric acid. It has the advantage of being practically harmless to the tissues and still capable of inhibiting the proliferation of bacteria." . . . "In the treatment of infection of or near the surface, hot boric acid dressings are deservedly in extensive use."²

Today boric acid must be regarded in a different light. Boric acid is not a disinfectant. Even saturated solutions do not kill bacteria, although some authors agree that for some organisms this drug may be bacteriostatic.³ Neither boric acid nor sodium borate is an oxidizing agent. For purposes of irrigation normal saline achieves equal results without danger. Potassium permanganate in 1/10,000 dilution and hydrogen peroxide have the two-fold advantage of possessing oxidizing powers and of lacking toxicity.⁴

The incidence of toxic effects caused by boron compounds is difficult to estimate. It is quite likely that many cases are not recognized. Mild symptoms may include deranged digestive processes. There may be loss of body weight. The feces may become watery.

It is when the administration of boron compounds is followed by death that the toxicity of these drugs is more widely appreciated. In 1947, McNally and Rukstinat⁵ reviewed the literature on poisoning by borates and were able to collect fifty-eight cases. Of these twenty-eight terminated fatally. In thirty-three cases a boron preparation, usually boric acid, was accidentally substituted for some other therapeutic agent, usually glucose, and was administered orally, subcutaneously or intravenously. Sixteen of these patients died. There were also four fatal instances of poisoning by the treatment of burns with boric acid ointment or fomentations. There were three deaths which resulted from the irrigation of closed cavities or wounds with boric acid solutions. Two cases of poisoning, one of which was fatal, followed the use of boric acid as a dusting powder. One death was attributed to the use of boric acid in bladder irrigations. Another followed the use of boric acid to initiate abortion. Other instances of poisoning were described but not enumerated. These followed the use of boric acid in enemata, and in gastric lavages. Infants have been poisoned when boric acid has been used as a wash for the nipples of the nursing mothers.

The toxicity of boric acid has not been entirely

*From the Pediatric and Laboratory Services of the Eastern Maine General Hospital.

overlooked. Its use as a preservative in food is forbidden by law in many countries including the United States. In 1943, a National Research Council sub-committee on burns and surgical infections recommended that boric ointment be discontinued in the treatment of burns,⁶ and during the last war the U. S. Army adopted this recommendation.

II Case Reports:

In the past two years at the Eastern Maine General Hospital we have had three deaths in which boric acid poisoning has been suspected. In the first case chemical analyses of the tissues obtained at autopsy failed to reveal the presence of boric acid or other compound of boron. In the second case small amounts of boric acid were recovered from the brain and liver. In the third case large amounts of boric acid were recovered from both the brain and liver.

Case I (suspected boric acid poisoning):

A two-months-old white female child was admitted during the summer of 1947 because of a diaper rash of two weeks' duration. This rash was treated at home with boric acid powder without improvement. During the two days prior to admission she had had three episodes of crying spells and peculiar, jerky movements of the arms and legs. On the way into the hospital the child continually screamed with pain. For several days prior to admission the child had a blotchy, reddish macular rash over the malar eminences of the cheeks. For about two days there had been some scaling of the skin.

At the time of admission the child revealed a macular rash over the cheeks with some dry scaling and some fading coalesced red macules. In the diaper area there was a reddish-purple maculo-papular ulcerating and crusting rash covering the vulva and buttocks. No exudate or pus was seen. The temperature was 100° F.; the pulse 120 per minute; the respirations 30 per minute. The chest was clear to auscultation and percussion. The heart was not enlarged. The rate was rapid and regular without murmurs. The child moved all of her limbs normally. The reflexes were normal.

The blood hemoglobin was 7.5 gms. per 100 cc.; red blood count 2,020,000 and the white blood count 17,800 per cu. mm. The differential leukocyte count was polymorphonuclear leukocytes 21%; bands 4%; small lymphocytes 75%. The blood dextrose was 93 mgm. per 100 cc. The urine was clear, yellow, acid, 1.005, and showed negative qualitative tests for albumin and sugar. There were three to five leukocytes per high power field. A urine culture showed no growth. A stool culture showed no pathogens.

On the day of admission the patient regurgitated

a small amount of her formula. The following day she vomited a large amount of her formula and had convulsive movements of her entire left side. The patient appeared rigid. The following morning the fontanelles were level. There was no marked rigidity, but there was some twitching of the legs. The knee jerks were "very lively." The pupils reacted well. The following day the neck appeared stiff and was arched backwards. The child was tense and rigid. A lumbar puncture the day after admission revealed an initial pressure of 180 mm. of water. The spinal fluid appeared clear. There was insufficient quantity obtained for laboratory analysis. The child had three to four stools a day for several days with one loose green-yellow stool. The temperature did not go above 100° F. and it dropped to 98.6° F. on the fifth day. The child was discharged on the eighth day having gained from eight pounds two ounces to eight pounds seven and one-half ounces.

The patient began to have loose stools after going home and lost weight. After ten days at home she was readmitted because of diarrhea. She was in a markedly dehydrated condition and died approximately six hours after admission.

Post-mortem examination revealed an emaciated infant with wrinkled skin and a slight creamy yellowish discharge at the labia. No excoriations of the skin were demonstrable at the autopsy. The heart appeared grossly unaltered. Histologically the myocardial fibers appeared excessively fragmented. No active inflammatory process could be distinguished. The lungs were of normal weight. Microscopically the pulmonary alveoli appeared incompletely expanded. Some of the bronchioles contained desquamated cells and coagulated protein, but no active inflammatory process could be distinguished. The spleen weighed only ten grams and was dark red in color. Phagocytosis of erythrocytes and deposition of hemosiderin were found throughout the spleen. The gastric mucosa appeared well preserved. The duodenal mucosa revealed post-mortem necrosis. Small congested areas were seen grossly in the jejunum. The colon appeared thickened. Microscopically sections of jejunum, ileum and colon revealed a superficial desquamation of the mucosal epithelium with a moderate fibroblastic proliferation in the underlying stroma throughout which there was a moderate infiltration of neutrophils and eosinophils. A moderate regeneration of jejunal epithelium was suggested by the presence of mitoses in the lining epithelial cells. The liver was small weighing only 98 grams. Throughout the liver was a mosaic pattern formed by marked vacuolization of the liver cells in the portal zones. The central three-fourths of each liver lobule appeared well preserved. There was slight hemorrhage in the stroma of the right adrenal medulla. Both kidneys showed incomplete

formation of glomeruli. The striking changes were in the epithelial cells lining the convoluted tubules which were swollen, granular and eosinophilic. Many of the nuclei in the tubular epithelium were small and pyknotic. Some epithelial cells had no demonstrable nuclei. The calyces and blood vessels were essentially unaltered. The bladder showed no evidence of edema, hemorrhage or inflammation. There were a few small areas of endometrial hemorrhage. There was moderate desquamation of epithelial cells from both the endocervix and ectocervix.

The brain weighed 512 grams. Scattered small perivascular hemorrhages were observed in the medulla, cerebellum and corpus striatum. No deposits of hemosiderin were seen. Clumping of chromatin was observed in the cytoplasm of nerve cells at various levels. Samples of brain and liver were submitted to the State of Maine Department of Health and Welfare where they were analyzed for boric acid or other compound of boron and none were found.

Case No. 2 (suspected boric acid poisoning):

This well-developed and well-nourished two-year-old white male child was admitted to the Eastern Maine General Hospital with second degree burns over the chest, right arm, both axillae, the neck and the right side of the face. The burns were said to have been produced by accidental scalding with hot water. On admission the blood hemoglobin was 9.3 gms. per 100 cc., the red blood count was 3,640,000, and the white blood count 12,500 per cu. mm. The differential leucocyte count was neutrophils 58%; lymphocytes 39%; and monocytes 3%. Boric acid and pressure dressings were applied in the accident ward. The patient appeared to be doing well for approximately twenty-four hours when he vomited and became cyanotic. His respirations increased to sixty per minute. Three hours later he vomited again. He was given a clysis of 200 cc. of 5% glucose in saline and 12,500 units of penicillin. An hour later he was given oxygen and artificial respiration. He expired twenty-five hours after admission.

Post-mortem examination revealed the second degree burns described above. Both conjunctivae were markedly congested. The spleen was slightly enlarged, with prominent lymphoid follicles. There were numerous enlarged mesenteric nodes, one of which measured $1.7 \times 1.0 \times 0.5$ cms. Microscopically some of the follicles contained a deposition of eosinophilic coagulated protein, throughout which were scattered pyknotic nuclei. The lungs showed no evidence of any active pneumonic process, although erythrocytes were found in some of the alveolar spaces. The adrenals appeared small. A few polys were found in the medulla of each adrenal. There was slight hemorrhage in the medulla of the right adrenal. The kidneys were not enlarged. Micro-

scopically there was a slight subepithelial hemorrhage in one of the calyces of the right kidney. The liver was of normal size, and mottled red and reddish brown. Vacuoles could be distinguished in some of the liver cells. The bladder showed no pathologic change. Small areas of necrosis were found in the solitary lymphoid follicles of the large bowel. There was moderate congestion of the vessels of the brain and meninges. Small perivascular hemorrhages were found in the region of the dorsal vagus and hypoglossal nuclei of the medulla. Ferrugination of nerve cells was observed in the inferior olivary nuclei. Small perivascular hemorrhages were observed in the mid-brain, in the tuber cinereum and lateral hypothalamus and in scattered parts of the cortex.

Samples of the liver and brain submitted to the State of Maine Department of Health and Welfare gave a positive test for borates. The brain revealed 0.0014% borates figured as boric acid, equivalent to 8.18 mgm. per total brain. The liver revealed 0.002% borates figured as boric acid, equivalent to 5.12 mgm. per total liver. The total estimated boric acid content of these two organs was 0.0133 gms.

Case No. 3 (Proved Boric Acid Poisoning):

A male child weighing eight pounds five ounces was born at the Eastern Maine General Hospital and at the end of one week was discharged in apparently good health. Two days after he arrived home he began to vomit. This persisted for eight days. The vomiting was said to have occurred from immediately after meals up to twenty-five minutes after meals. The parents believed that the vomiting was projectile in character. The child's buttocks were said to have been raw for ten days when he was readmitted to the hospital. Two days prior to readmission the baby broke out in a more or less generalized erythematous rash with scattered pustules.

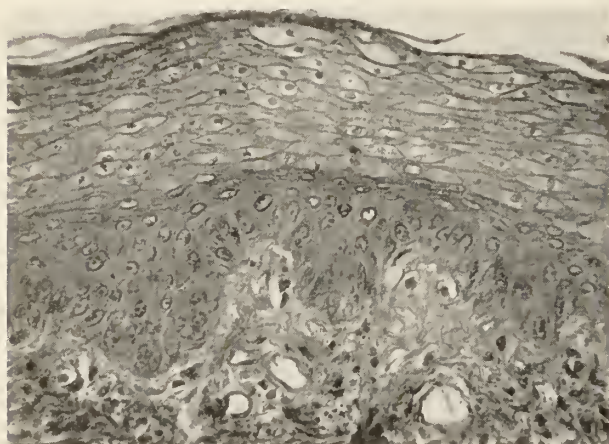
At the time of re-admission the child appeared well nourished but had a wide-spread erythematous rash covering the face, trunk, scrotum and buttocks. The temperature was 101° F. No superficial lymphadenopathy could be distinguished. The heart and lungs were clear to auscultation and percussion. The blood hemoglobin was 12 gms. per 100 cc., the red blood count 3,960,000 and the white blood count 36,200 per cu. mm. The differential leukocyte count was polymorphonuclear leukocytes 41%; small lymphocytes 59%. Cultures of the raw areas on the buttocks revealed hemolytic streptococci, non-hemolytic staphylococci and colon bacilli.

On the day of admission boric acid ointment was applied to the buttocks. The following day boric acid ointment was applied to the entire body. On the second day the rash had lost its "fiery redness." Although still present, it appeared much improved. Projectile vomiting was noted after the feedings. On the third day the child appeared to be "filled

with mucous" when the nurse picked him up for his feeding. He rapidly became cyanotic and respirations became unobtainable. In spite of supportive therapy the child rapidly succumbed.

Post-mortem examination revealed numerous excoriations of the face, ante-cubital fossae, forearms and lower legs. A diffuse exfoliative dermatitis was noted involving the neck, upper thorax, arms and lower legs. (Fig. 1). A large denuded area 12.5

FIGURE 1

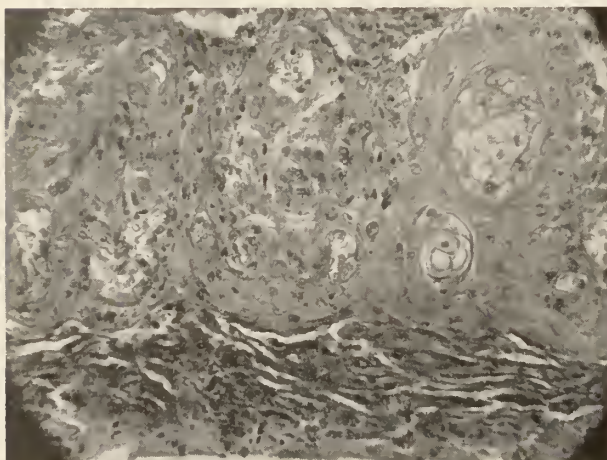


Case 3. Skin of abdomen (hematoxylin and eosin).

The predesquamative epithelial hyperplasia is evident in this section. There is a marked heaping up of nucleated squamous epithelial cells on the surface.

x 9.5 cms. was present over the anterior abdomen. Denuded areas were present over both buttocks. (Fig. 2). Small denuded areas were present over

FIGURE 2

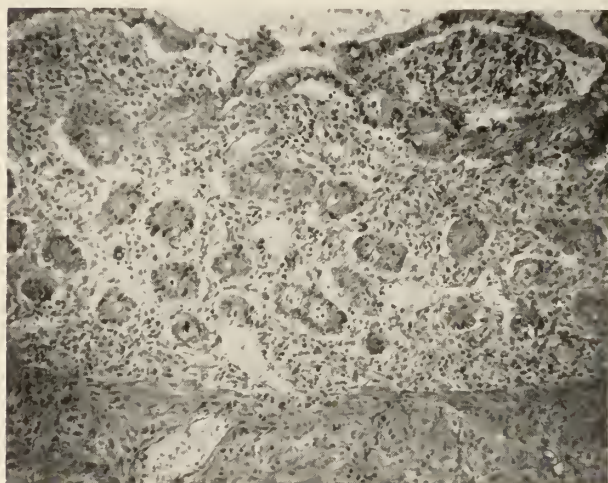


Case 3. Skin of buttocks (hematoxylin and eosin).

On the surface there is necrotic desquamated epithelium mixed with fibrin and leukocytes. Marked vascularization of the papillae can be seen beneath the regenerating epithelium. Neutrophils are scattered throughout the dermis.

the posterior thorax. There was excoriation and desquamation of the scrotal epithelium. Frothy fluid exuded from the nostrils. There was approximately 5 cc. of clear yellow fluid in each pleural cavity. There was increased fluid in the pericardial sac. Edema fluid could be demonstrated in the lungs. Rare neutrophils and occasional erythrocytes were found in the right upper and lower lobes. Enlarged mesenteric lymph nodes showed moderate edema with polys and eosinophils scattered through the nodes. Sections of the ileum revealed a rather striking change histologically. (Fig. 3). Scattered areas

FIGURE 3



Case 3. Ileum (hematoxylin and eosin).

The exfoliative enteritis has many of the characteristics of the skin lesion shown in Figure 2. Mitoses can be seen in the regenerating epithelial cells. There is a diffuse infiltration of neutrophils.

of erosion of the mucosa revealed an exudation of erythrocytes, neutrophils and serum. In many areas the epithelium was lifted away from the sub-mucosa with an accumulation of fibrin between the two layers. There was desquamation and active regeneration of the mucosal epithelium. Numerous mitotic figures could be seen in the epithelial cells.

The liver was moderately enlarged weighing 196 grams. On section there was a mottled reddish-brown and yellowish-brown surface. Histologically there was vacuolization of many liver cells and a marked hyalinization of the cytoplasm of the non-vacuolated liver cells. The liver sinusoids were congested. There was considerable congestion of the inner zone of the adrenal cortex. The combined weight of the kidneys was 27 grams. The convoluted tubules were swollen and granular. Occasional red cells and small amounts of fibrin could be demonstrated in the capsular spaces of the glomeruli.

The bladder was small and contracted. The bladder mucosa appeared edematous with scattered mu-

cosal hemorrhages. Papillary projections could be demonstrated in the bladder mucosa. (Fig. 4). In

FIGURE 4



Case 3. Bladder (hematoxylin and eosin).

This section illustrates the characteristic papillary hemorrhagic edema of the bladder mucosa.

some areas the mucosa was thickened with a heaping up of epithelial cells. A moderate number of mitoses could be demonstrated in the bladder epithelium.

The brain weighed 482 grams. There was moderate congestion of the meninges. Microscopically there was marked cerebral congestion with a few scattered perivascular hemorrhages in the basal ganglia.

Samples of the liver and brain submitted to the State of Maine Department of Health and Welfare gave a positive test for boric acid. The amount of boric acid removed from the liver was 0.236%, equivalent to 0.462 grams in total liver, which weighed 196 grams. The amount of boric acid recovered from the brain was 0.146%, equivalent to 0.704 grams in total brain, which weighed 482 grams. The total estimated boric acid content of these two organs was 1.166 grams.

DISCUSSION

In Case No. 1 the clinical history strongly suggested the possibility of boric acid poisoning. Although no pathognomonic lesions were found at autopsy and chemical analysis of brain and liver failed to reveal the presence of boron, it is possible that the boron was eliminated from the body of the child before death ensued, but that permanent cerebral damage from the boric acid was incompatible

with life. The status of this case must be considered doubtful.

In Case No. 2 it is difficult to say how great a part boric acid may have played in the death of the child. The lesions in the lungs, liver, kidneys, adrenals and lymph follicles may have been secondary to the burns. The brain lesions are unusual and were not of the type described in boric acid poisoning. It is likely that the toxicity of the boric acid was at least a component of the mechanism of death.

In Case No. 3 there was ample opportunity for large quantities of boric acid to be absorbed through the large expanse of injured skin. The characteristic anatomical changes of exfoliative dermatitis, hemorrhagic edema of the bladder, exfoliative enteritis, toxic hepatosis, toxic nephrosis, and adrenal congestion ensued. It is interesting to note that changes in the intestinal mucosa occurred which are essentially the same as those seen following the ingestion of boron. We believe that the boron in this case was absorbed from the raw skin surfaces.

III Discussion:

A. Metabolic Changes

Absorption of boric acid solutions takes place by osmosis and is very rapid.⁷ The brain, liver, and fat depots of experimental animals take up within three hours concentrations comparable to those found in human subjects who have died as the result of boric acid poisoning.⁸ From the variety of accidents which have occurred it is obvious that toxic amounts of boric acid may be absorbed from the pleurae, mucous membranes, and denuded areas of skin.

A most insidious and often fatal form of boron poisoning occurs after the irrigation of a closed cavity with boric acid. 75% of the boric acid in the aqueous solutions used for this purpose may be absorbed.⁸ A fatal amount has been absorbed from a walled-off empyema space.⁴

Boric acid is not detected in the blood, but blood chemistry studies show an increase in non-protein nitrogen and sometimes of potassium. No changes in other electrolytes have been reported.⁸

Excretion of boric acid is slow. In forty-eight hours about 60% is eliminated through the urinary and gastrointestinal tracts.⁸ Even the saliva may contain boric acid.⁴ If 200 mgm. of boric acid be injected subcutaneously each day, its excretion in the urine reaches a plateau only after 14-18 days, when 85% has been eliminated. Its excretion continues for four days after the administration is stopped. Cumulative action is evident, but if the patient survives long enough, all of the boric acid may leave the tissues before death ensues.⁸

Boric acid and borax are excreted unchanged.⁸ Urinary nitrogen is slightly decreased, and there is

a concomitant increase in urinary phosphates.³ Phosphorus metabolism is disturbed in boron poisoning. The phosphorus lines disappear from the spectrum of the fractions of brain tissue which can be shown to have absorbed boron. The phenomenon of phosphorus release, of which one expression is increase of urinary phosphates, takes place when phosphorus is displaced from compounds which have a greater affinity for boron.⁸ In addition, the absorption of fat and nitrogen is somewhat diminished.³

The lethal dose of boric acid varies. Some individuals are quite susceptible to its action, and infants are particularly vulnerable. The median lethal dose is given as somewhat more than 15-20 gms. in adults, and somewhat more than 5-6 gms. in infants.^{8,9} Some writers have given values as low as 1-3 gms.⁴ as the median lethal dose in infants. In adults two recoveries have been reported following the subcutaneous administration of twenty and twenty-eight grams of boric acid respectively. One woman recovered following the intravenous administration of fifteen grams of boric acid.¹²

B. Distribution and Concentration of Boric Acid

Of the fifty-eight cases of boric acid poisoning reported in the literature only fourteen have had chemical analyses of the tissues. In McNally and Rust's series of six fatalities in infants,⁷ the brains contained an average of 0.210 gms.% of boric acid, and the livers approximately 0.182 gms.%. Pfeiffer et al. found the cerebral cortex of experimental animals to contain approximately 1.5 times the concentration found in the corpus callosum, and the concentration of boric acid in the cortex was approximately 1.08 times the average concentration in all brain tissue. Boron was found in the spinal cord and peripheral nerves, and also in relatively high concentration in the body fat depots. It is postulated that it occurs in the latter as a boroglycerate.⁸

Other workers whose results we have reviewed have all shown the brain to contain a higher concentration of boric acid than the liver. In one instance our results have shown the reverse. In case No. 3, in which highly significant amounts of boric acid were recovered post-mortem, the liver contained approximately 1.62 times the concentration found in the brain. It is possible that more rapid excretion from the brain than from the liver may explain our figures. At the time of death, however, the brain and liver alone contained more than 1/5 of the median lethal dose of boric acid.

C. Clinicopathologic Correlation

Boron may be classed among the metallic poisons which have a special affinity for the central nervous system. Compared to other metals, such as arsenic

and lead, the action of boron is rapid, and if the patient lives, recovery also is rapid and complete.⁸

Symptoms in boric acid intoxication depend upon lesions of:

1. The central nervous system.
2. The gastrointestinal tract.
3. The urinary tract.
4. The skin.

The lesions in the central nervous system are neuronophagia, hyperchromatosis, congestion and edema. The symptoms are shock and coma, meningismus and convulsive tremors. These are most likely to occur within a few hours in cases receiving large doses. The nervous tissue of experimental animals ceases to react to boric acid after seventy-two hours of exposure, but whether this finding has clinical correlation is uncertain.⁸

The lesions of the gastrointestinal tract are hyperaemia, petechiae and superficial ulceration of the mucosa, which frequently evolve into a highly characteristic exfoliation that tends to affect chiefly the lower small bowel. The mesenteric lymph nodes are enlarged. The related symptoms are early nausea, followed by vomiting and diarrhea, with resulting dehydration. When the clinical course is prolonged, nutrition is impaired.

The liver suffers an acute toxic hepatitis.

The lesions of the urinary tract are acute toxic nephrosis and hemorrhagic papillary edema of the bladder mucosa. The urine may be scanty and may contain casts, albumin and red blood cells.

The lesions of the skin are those of an erythematous rash like that of scarlet fever. The entire skin may become "lobster red." If the patient survives longer than 24-48 hours, desquamation occurs, and the rash evolves into an exfoliative dermatitis which may spare no area of the body surface. This process is very characteristic of boron poisoning.

A typical clinical picture is that of mild shock and nausea, followed in a few hours by vomiting, diarrhea, more profound shock, and the appearance of an erythematous rash.⁴ The clinical course may last no more than a few hours,⁵ being cut short by the early occurrence of severe shock, coma and death. Some patients may be less dramatically ill and live many days, showing before recovery or death some combination of the symptoms previously described. It is usual, however, for recovery or death to take place within five days,⁴ but death has been known to occur eleven days after the source of the poison had been eliminated.⁸ Secondary infection may kill the patient even if the boron does not.¹⁰

Chronic boron intoxication has been described, and is characterised by eczema, edema, stomatitis, and a grey line on the gums.¹¹

Continued on page 350

THE PATHOLOGY AND THERAPY OF FROST-BITE

RICHARD C. WADSWORTH, M. D. (a) and BYRON V. WHITNEY, M. D. (b)

In recent years there has developed a new understanding of the pathogenesis and therapy of frost-bite. Many of the recent advances are a result of the studies on high altitude frost-bite, trench-foot and immersion foot sustained by the men in the Armed Forces during World War II. With a better knowledge of the development of these processes we are now able to apply the experience gained in war to the treatment of similar lesions acquired in civilian life.

The sequence of events in severe injury to cold has been studied experimentally in both rabbits and man by Lange, Weiner and Boyd.¹ Exposure of a limb to cold air at 0° C usually results in blanching, followed by the development of an intense pink color which, with further cooling, reverts to a cadaverous blanching. The duration of the blanching depends on the length and severity of the exposure. As the limb is thawed an intense red color develops accompanied by local swelling and increased temperature. Blisters tend to develop rapidly and may burst within twenty-four or forty-eight hours. Organization of thrombi probably begins at about seventy-two hours.² Within three to ten days, dry black areas appear followed by sharply demarcated dry gangrene.

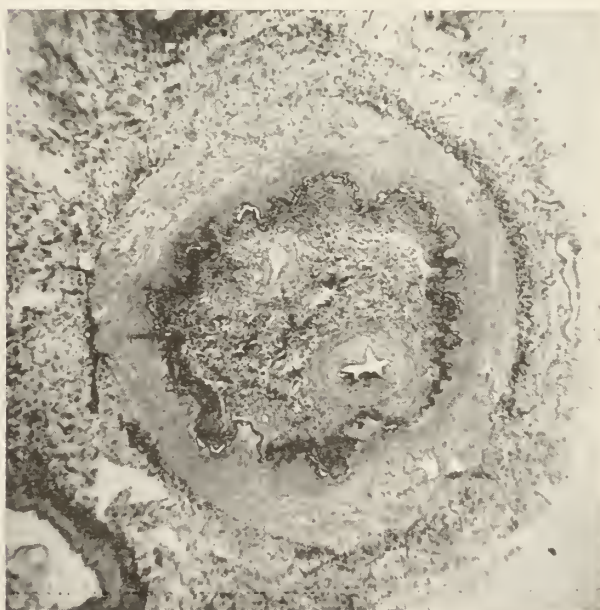
The initial blanching of the exposed limb is due to a diminished blood flow through the capillaries of the exposed areas associated with a grouping of the erythrocytes into irregular clumps, and a complete cessation of circulation in the part. As thawing develops the flow of blood returns and the erythrocytes again become discrete. With the increased blood flow there is an increased permeability of the damaged capillaries, with consequent loss of plasma and concentration of erythrocytes. During this phase the erythrocytes form a sludge in the capillaries with little deposition of fibrin. These masses of sludge later undergo hyalinization and occlude the vessels. As a result of vascular occlusion and the resulting ischemia gangrene of tissues develops distal to the occluded vessels.

The skin, subcutaneous tissues, blood vessels, muscles, nerves and bone may all be involved in the pathologic process. The cells of the epidermis may be vacuolated and there is apt to be a concomitant intercellular edema. The vesicles in the epidermis may contain fluid and leukocytes. The sweat glands often show degenerative changes. Infiltration of

leukocytes is seen about the sweat glands and blood vessels. The collagen of the subcutaneous tissue may show evidence of degeneration or necrosis. Vessels may be plugged by agglutinated masses of red blood cells. The capillaries and small vessels may show proliferation of endothelial cells. The subcutaneous fat may be infiltrated with leukocytes. In the subcutaneous tissue evidence of fat necrosis with foam cells and giant cells is frequently found.

The blood vessels may show thrombi in various stages of development depending on the duration of the process. Mural hemorrhages and inflammation are described in both plugged and patent vessels. By the end of a month the larger arteries may portray the picture of endarteritis obliterans. The lumen of the obliterated arteries becomes filled with fibroblasts, lymphocytes and hemosiderin-laden phagocytes. Recanalization of these vessels is a common finding (Figs. 1 and 2). The elastica is rarely destroyed.

FIGURE 1



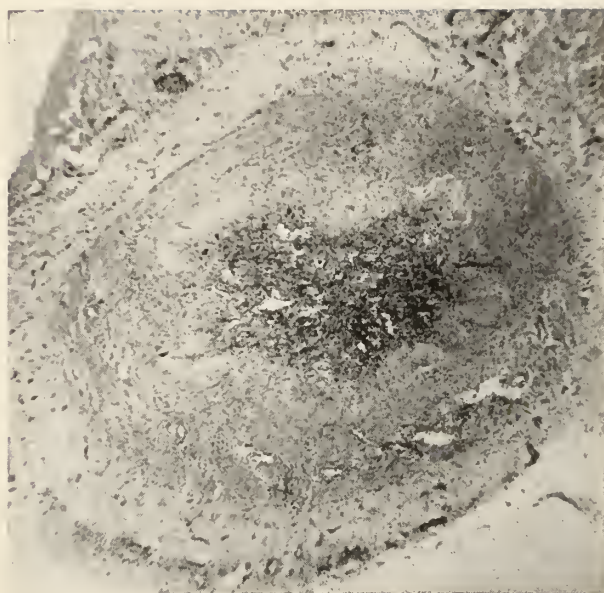
Case No. 2. Anterior tibial artery. Verhoeff elastic tissue stain. Note thrombosis and recanalization of lumen. Deposits of hemosiderin are observed throughout the organized thrombus. There is considerable splitting of the internal elastic lamina. The muscularis is well preserved.

The ischemic muscles may show degeneration, necrosis, and cellulitis without atrophy in the early cases. Extensive atrophy may occur as early as forty days.

(a) Chief of Laboratory Service, Eastern Maine General Hospital.

(b) Former Surgical Resident, Eastern Maine General Hospital.

FIGURE 2



Case No. 2. Anterior tibial artery. H. & E. Note the diffuse lymphocytic infiltration in the organized thrombus. There is a slight perivascular lymphocytic infiltration of the vasa vasorum. Lymphatics in the adventitia are infiltrated with lymphocytes and occasional polys.

The nerves appear swollen and edematous in the regions of inflammation with areas of degeneration in the axis cylinders and myelin sheaths. In late cases there is usually demyelination below the zone of demarcation. There may be some perineural fibrosis.

There may be necrosis or osteomyelitis of involved bones.

Lange et al¹ have shown that the application of cold or heat to the lesions of frost-bite produced experimentally in human volunteers results in increased severity of the lesion. Their experiments indicate that there is a fallacy in the concept that cooling subsequent to frost-bite improves the clinical course. Although cooling with an ice-bag prevents blister formation while the ice-bag is applied to the lesions, when the ice-bag is removed the blisters appear rapidly and are even larger than those in the control lesions.

In 1945, Lange, Boyd and Loewe³ demonstrated that heparin would prevent the development of gangrene after exposure to cold. Additional confirmation of the therapeutic value of heparin is to be found in the paper of Langer, Wiener and Boyd.¹

In 1947, Friedman, Lange and Weiner⁴ compared the histology of the tissues of animals receiving heparin and subjected to freezing with those of animals similarly exposed to cold without receiving the drug. They showed that heparin prevented the development of both thrombosis and gangrene.

The recent work of Laufman, Martin and Tanburi⁵ supports these observations. In experiments on dogs they produced venous occlusions of mesenteric vessels and observed sludge formation and subsequent thrombosis of the veins distal to the point of occlusion. These observations were made by the Kniseley fused quartz rod transillumination apparatus.⁶ When heparin or Dicumarol was administered to the dogs before the experiment, the sludge formation developed in ten to thirty minutes after occlusion of the vein, but these masses did not become adherent to the wall of the vein. Upon release of the occlusion the blood within the small vessels resumed rapid flow. We thus have visual knowledge of the anticoagulant effect of heparin and Dicumarol in preventing thrombosis in temporarily occluded vessels. Thrombosis was likewise prevented when heparin was administered after sludge formation had appeared but before the veins were occluded by thrombi.

TREATMENT

With this understanding of the natural course of the disease we are in a better position to prevent the development of gangrene with the ensuing loss of digits or limbs. The treatment of frost-bite can readily be divided into three phases. The first, that of prophylaxis, includes those precautions which insure the best possible circulation in the vessels of individuals who are to be exposed to low temperatures for any protracted period of time. The second phase, that of early treatment, has its optimum effect in the first twelve hours but is certainly of value in the first 72 hours. The third phase, the late treatment of frost-bite is primarily concerned with the relief of symptoms after irreparable damage has been accomplished.

The phase of prophylaxis should include, if possible, the prevention of exposure to severe cold of individuals with poor circulation. Men engaged in snow removal, logging, ice cutting and similar occupations should have routine histories and physical examinations to eliminate those with diabetes, advanced arteriosclerosis, Buerger's disease, epilepsy, myocardial insufficiency, vasomotor instability, luetic arterial disease, foot deformities, mal-nutrition and post-traumatic circulatory disorders. These people are particularly susceptible to the effects of cold. All personnel should be carefully instructed in the hazards of exposure to wet and cold. Proper clothing should be mandatory for those who anticipate exposure to these conditions. As the circulation in the lower extremities is most frequently suppressed particular attention should be paid to proper protection of the feet. Adequate footwear includes waterproof shoes, or boots, of not too rigid construction. They should be sufficiently large to allow two pairs of heavy woolen socks without excessive constrict-

tion. The socks should be smooth to prevent localized areas of pressure. The socks should be changed when wet. Moisture is one of the predisposing factors to frost-bite. Wet socks tend to constrict the feet and interfere with the circulation. Since water is a better heat conductor than air, it accelerates the dissipation of heat from the body. Rubber boots should not be worn as they increase the tendency to perspire. When the extremities are wet the protection of natural skin oils are lost. Oil or grease may be prophylactically applied before exposure or repeatedly applied if the exposure is prolonged. With prolonged exposure it is necessary to avoid those factors which will decrease the peripheral circulation. Such factors are prolonged dependency of the extremities, the assumption of cramped positions and constriction by tight clothing. Woolen mittens with outside waterproof covering should be worn on the hands.

With prolonged exposure to cold gentle massage of the hands and feet may be beneficial if no numbness has developed. When numbness or tingling is present it is extremely important to avoid any trauma to the involved areas. Under such circumstances the affected part should be handled as little and as gently as possible. Rest and avoidance of infection are of utmost importance. The use of heat is contra-indicated. Elevation of the involved extremities is beneficial to promote drainage of edema fluid, to prevent venous stagnation and to reduce the metabolism in the affected part.

Treatment of the acute stage of frost-bite is concerned with the prevention of vascular thrombosis and prevention of infection. If treatment can be instituted within 72 hours after exposure gangrene can frequently be prevented by the use of anti-coagulants. Heparin and Dicumarol are to be recommended. Heparin is of great value for initial therapy, because of its prompt action. Dicumarol is of value because of its ease of administration and because of its relatively low cost. It should be emphasized that the continued administration of these drugs must be controlled by adequate laboratory procedures.⁷ The effect of heparin administration must be followed by determinations of the clotting time for blood. The effect of Dicumarol must be followed by determination of the prothrombin time.

If heparin alone is used the initial dosage should be 300 mgms. of heparin in 2000 cc. of physiologic saline administered at the rate of 20 to 25 drops per minute. Additional heparin should be administered by this method for seven days following the frost-bite. The daily dosage of heparin should be adjusted to maintain the clotting time of the blood between 25 and 60 minutes. At the onset of this treatment it may be necessary to determine the clotting time every four hours in order to evaluate the effect of

heparin upon each individual patient. Later, a daily determination of the clotting time is sufficient.

No reports in the literature on the clinical use of Dicumarol in the therapy of frost-bite have come to the attention of the authors. Because of the expense of the continued administration of heparin and because of the ease of administration of Dicumarol the authors recommend the use of a combination of these two drugs. Heparin is used initially because of its immediate anti-coagulant effect and Dicumarol is used as the maintenance anti-coagulant. It should be emphasized that Dicumarol should be used only where laboratory facilities are available for repeated estimates of blood prothrombin time. The prothrombin time should be decreased to a level between 20% and 30% of normal in order to acquire adequate anti-coagulant effect.

The combined heparin-Dicumarol therapy is initiated with 300 mgms. of heparin administered intravenously in 2000 cc. of physiologic saline. At the same time 300 mgms. of Dicumarol are administered by mouth. On the second day 300 mgms. of Dicumarol are given if the prothrombin time remains above 30% of normal. The subsequent dosage of Dicumarol, approximately 100 mgms. per day, is regulated according to the daily prothrombin time reports.

Although heparin in Pitkin's menstruum has been used subcutaneously by some observers its use has been discarded by many because of pain and the formation of hematoma at the site of injection.

Additional therapy consists of bed rest, elevation of the extremities slightly above the level of the heart, exposure of the extremities to room temperature and the protection of wounds by sterile dressings. Massage or rubbing of any sort in the early stages is strictly avoided. No local antiseptics or ointments are used. Penicillin or sulfonamides should be administered routinely for the prevention of infection. Routine antitetanus therapy is advised.

Of the various vaso-dilator drugs papaverine and nicotinic acid are the most commonly used. Papaverine may be administered intravenously, in one-half to one grain doses, every four hours or may be given orally in five grain doses every four hours. This drug is effective in the relief of vasospasm thereby increasing the collateral circulation with the relief of pain. Nicotinic acid may be administered twice daily in doses of 100 mgm. each.

Neither lumbar sympathetic nerve block nor sympathectomy will relieve the pain of the acute stage of frost-bite. There is no evidence that these procedures will increase the circulation to the extremities at this time.⁸

The treatment of the late stage of frost-bite, which includes those beyond 72 hours' duration up to several months or years depends largely upon the residual

effects. If the exposure has been prolonged and the temperature has been below freezing, irreversible changes are expected to be present. If a line of demarcation is present amputation is indicated. The vasomotor and neurologic manifestations secondary to damage of the vessels and nerves must be evaluated. As illustrated in the case reports the late symptoms and signs may include coldness of the feet in cold weather and burning of the feet in warm weather, excessive perspiration, numbness and tingling sensations, hypaesthesia, anaesthesia, pain, blanching of the feet on elevation and cyanosis of the feet in a dependent position. A lumbar sympathectomy may be of value in those cases in which a paravertebral lumbar sympathetic block with novocaine gives a favorable response. The elevation of temperature of the feet occurring after the block or sympathectomy will depend on the amount of vasospasm present. There is usually a relief of the sweating, coldness, burning, numbness and tingling sensations.

Additional aid in the evaluation of the late stages may be gained by the use of arteriography.⁹

Case No. 1 is an example of frost-bite treated within twelve hours after exposure. This was a 28-year-old white male in excellent general condition who, because of intoxication, remained in a snow bank for an unknown number of hours during a winter night when the recorded temperature was between 0° and 10° Fahrenheit. Upon admission to the hospital his face was flushed. His hands were swollen with vesiculation of the dorsal surfaces. Both feet and the lower half of the lower legs were cold presenting a cadaveric appearance with blanching and purple mottling. The nails were blue. The patient stated that his feet felt like blocks of wood. There was anaesthesia of both feet and of the lower half of the lower legs. All peripheral pulsations were present.

As heparin was not readily available 400 mgs. of Dicumarol was administered immediately. This was followed by 200 mgs. of Dicumarol the following day. 300 mgs. of heparin was given intravenously in 2000 cc. of physiologic saline twelve hours after admission. No further heparin was necessary in this case as the prothrombin level had decreased to 30% of normal in 24 hours. Daily maintenance doses of 50 to 100 mgs. of Dicumarol were administered up the seventh hospital day. Additional therapy consisted of exposure of the feet and legs to room temperature, application of sterile dressings to the raw areas on the feet and the administration of 50,000 units of penicillin every three hours. On the second hospital day the feet and lower legs were swollen and red with many vesicles. On the eleventh hospital day desquamation occurred revealing normal skin be-

neath. By this time all swelling had disappeared. The patient complained of pain and paresthesias in the extremities from the fourth to the twelfth day. He was given papavarine, ½ grain, intravenously on admission, and 1 grain p. o. every four hours for approximately ten days. He was discharged on the fourteenth hospital day with no complaints.

Case No. 2 represents a late stage of frost-bite complicated by the presence of peripheral vascular arteriosclerosis. This patient was a 41-year-old white male who gave a history of intermittent claudication in the left leg for several years. Six months prior to admission he froze his feet, and for three months he had had increasing pain in the left foot, especially in the region of the fifth toe.

Physical examination on admission revealed enlarged tender lymph nodes at the left fossa ovalis. There were red streaks on the dorsum of the left foot. There was a dark ulcerated area on the fifth toe with a zone of redness and swelling surrounding the ulcer. The dorsalis pedis and posterior tibial pulsations were absent bilaterally. There was a claw foot deformity of the left foot. The mechanism of development of this type of claw foot deformity is well described by Patterson and Anderson.¹⁰ The immediate treatment consisted of penicillin, sulfadiazine, papavarine, nicotinamide and Buerger's exercises. The fifth toe was eventually amputated because of further gangrenous changes and pain. Later the patient developed gangrene of the fourth toe and amputation of the lower leg below the knee was performed, but the stump failed to heal. A mid-thigh amputation of the left leg was finally done and a well healed stump resulted. The patient was in the hospital for a total of 73 days. Upon discharge he was advised to return in six months. The patient was readmitted because of pain in the right calf and right foot on walking and on exposure to the cold. He also had pain in the left mid-thigh stump. Physical examination at this time revealed a well healed left mid-thigh stump. The toes of the right foot were of a dusky red color in the dependent position and were blanched in the elevated position. The right posterior tibial and dorsalis pedis pulsations were absent. A lumbar sympathetic block with 1% metacaine at L1, L2 and L3, on the right, produced increased temperature of the toes. A left lumbar sympathetic block eliminated the phantom pain in the left stump. A bilateral lumbar sympathectomy was then performed in two stages. The patient was discharged on the 22nd hospital day asymptomatic.

Examination of the amputated toe revealed extensive gangrene. The epidermis was hyperkeratotic. A diffuse cellulitis of the subcutaneous tissue was characterized by an infiltration of neutrophils. There were degenerative changes in the subcutaneous fat

which was infiltrated with polys. Some of the fat cells contained confluent vacuoles. The bony phalanx revealed necrosis and leukocytic infiltration.

A study of the vessels from the amputated lower leg reveal changes similar to those described by Friedman¹¹ and by Friedman and Kritzlar.¹² The most marked changes were found in the anterior tibial artery which revealed thrombosis and recanalization (Fig. 1). The lumen was replaced by moderately dense granulation tissue infiltrated with lymphocytes and hemosiderin-laden phagocytes. There was a moderate perivascular lymphocytic infiltration of the vasa vasorum (Fig. 2). There was marked reduplication of the internal elastic lamina. Many of the small lymphatics in the vicinity of the thrombosed artery showed a diffuse infiltration of lymphocytes and polys throughout the walls. The posterior tibial artery showed marked intimal thickening with very little evidence of any inflammatory reaction. The nerves appeared essentially unaltered.

A study of the vessels of the thigh following the mid-thigh amputation revealed a marked intimal thickening with deposition of lipoid and moderate narrowing of the lumen of the femoral artery. There was slight splitting of the elastica. The nerves appeared essentially unaltered.

Case No. 3 represents a late stage of frost-bite. This 27-year-old white male in November, 1944, was in the Vosges Mountains, France, where for eleven days he was exposed to wet snow in weather which was below freezing. During this time he was unable to change his wet footwear and it was impossible for him to walk about. Much of the time was spent lying in a wet trench surrounded by the enemy. Upon liberation he was taken to a hospital. His shoes had to be cut from his feet which were swollen, white, and later became blistered. He had no feeling in his feet for three weeks and was unable to move his toes or ankles for ten days. At the end of three weeks anaesthesia was replaced by marked pain which persisted for about one year. For this he received physiotherapy and massage. Four years later, he complains of burning sensation in warm weather and coldness of the feet and distal third of both lower legs during the cold weather. He has paresthesias consisting of needle and pin-prick sensations as though his legs were asleep. Walking for short distances produces aching pains on the bottom of both feet. Physical examination reveals palpable pulsation of dorsalis pedis and posterior tibial arteries of both feet. The distal third of both legs are cold. The sensations of pain and touch appear intact. There is mild hyperesthesia to pin-prick in both feet. The majority of the findings are subjective, the only objective findings being coldness and hyperaesthesia.

Case No. 4 is another example of late frost-bite. This 24-year-old white male while fighting in Bel-

gium in 1944 was exposed to cold and wet without a change of socks or shoes for one month. His activities were not restricted. He was hospitalized because the swelling of his feet became so marked that he was unable to put on his shoes. At this time his feet were cadaveric in color and were numb. He remained in the hospital two weeks when, because of the military situation, it became advisable for him to move. He was now able to put on his shoes, but his feet were still numb and it felt as though he were walking on sticks. He was taken prisoner and was required to walk 100 miles. During this trip a raw area appeared on his left foot. After six weeks of exposure he was given one week of rest and then was placed on limited duty. It was two months before he had any feeling in his feet. No motor weakness was ever noted. Four years later he complains of coldness of feet with exposure and burning sensation along the lateral borders of his feet and in the region of his toes. His occupation is an indoor one and he can sit down most of the day so that his feet have given him very little trouble. However, he is unable to hunt and fish or take any part in outdoor sports during the cold weather. Walking approximately one-half mile causes his feet to become tired and the burning sensation reappears. Physical examination at this time reveals cold feet with a cadaveric appearance when the foot is elevated. Erythematous areas appear on the toes and dorsum of the foot when in the dependent position. The right dorsalis pedis pulsation is absent. The remaining arterial pulsations appear to be present. There is diminished sensation to pain and touch of all areas below the ankle. A lumbar sympathetic block has been advised on this patient in order to evaluate the possible effects of a lumbar sympathectomy.

Case No. 5 shows minimal signs of peripheral vascular disease, but does have both objective and subjective signs of peripheral nerve involvement.

During the winter of 1945 while with the army in Germany this 26-year-old soldier developed "Trench Foot." He had the usual clinical picture characterized by the sensation of walking on pins, swelling of the feet and blistering with motor and sensory loss involving the feet and distal third of lower legs.

At present he complains of aching and sharp pains in feet extending up the lower legs after walking for about a half-mile or standing for an hour. There is excessive sweating of the feet in warm weather and coldness when the temperature is low. The patient's activities are definitely restricted.

Both feet and the distal thirds of both lower legs are cold, the left being colder than the right. There is moderate blanching of the feet with elevation. All arterial pulsations are present but appear diminished. The pulsations in the left leg are less prominent than

those on the right. There is gradually diminishing sensation of touch and pain from the knees to the soles of the feet.

Bilateral lumbar sympathetic block produced a ten degree elevation of skin surface temperature of both lower legs and feet. There appeared to be an increase in the prominence of the left dorsalis pedis pulsation. This patient is to be offered a bilateral lumbar sympathectomy.

SUMMARY

A review of some of the recent experimental work on frost-bite is presented with the suggestion of adopting the principles therein laid down for practical application in the treatment of frost-bite.

The therapy of frost-bite varies according to the duration of the lesion and the extent of damage created in the exposed area. Three phases of therapy are discussed: 1. Prophylaxis. 2. Treatment of Early Frost-bite. 3. Treatment of Late Frost-bite.

Five cases of frost-bite are presented. One case shows the value of early anti-coagulant therapy. Four cases are presented to show the remote effects of inadequately treated cases.

Boric Acid—Poison — Continued from page 344

D. Therapy

The logical therapeutic approach to boron poisoning should direct one's main efforts toward combating shock and promoting the excretion of boron. Unfortunately, neither clinically proven nor specific antidotes are known. We know of no case in which BAL or BAL glucoside has been tried. Pfeiffer's experiments indicate that repeated large intravenous dosages of Ringer's solution 50%, plasma 50% act as an effective antidote in mice, but we have seen no report on the use of these medications in humans.⁸

SUMMARY

Boric acid is ineffective as a bacteriostatic and bacteriocidal agent. It acts as a poison, and fatalities from its use are reported.

The manifestations of boric acid poisoning are erythema of the skin followed by exfoliative dermatitis, exfoliative ileitis, hemorrhagic papillary edema of the bladder mucosa, and degenerative changes in the central nervous system. Large doses of boric acid produce a severe state of shock.

Three fatal instances of suspected boric acid poisoning are presented. The role of boric acid in causing the death of the first patient must remain in doubt. In the second case, the toxicity of boric acid was apparently a component in the mechanism of

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death. In the third case, the brain and liver contained sufficiently high concentrations of boric acid to establish boric acid poisoning as the cause of death.

Boric acid should be recognized as a dangerous poison and eliminated from the Pharmacopoeia.

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ELECTROSHOCK THERAPY

A Survey of 171 Cases Treated in Private Practice*

ARTHUR P. STEBBINS, M. D.

It is at the present time generally accepted that Psychiatry, the practice and application of its principles, has left the environs of hospital walls and practice, and has taken its rightful place in private practice, along with medicine and surgery.

In some instances, however, the physician, as well as the patient, finds it difficult to appreciate the fact that the individual may have definite and severe somatic complaints, which are entirely functional and psychogenic in origin, and are not due to organic disease, *per se*.

It should be understood that the patient is not, to use the vernacular, "wacky," "crazy" or imagining that he does have his symptoms. His symptoms are present and very disturbing. He is a perfectly normal individual in every respect, pursuing his everyday activities as a capable and self-sustaining member of our society. Today, it is definitely known, and has been accurately determined by statistics and experience, that one-third of the patients who enter a doctor's office for relief, have symptoms which are functional in origin, and that a complete physical examination, X-rays and all other laboratory procedures are entirely negative. Another third have many symptoms which are functional in origin plus other symptoms due to some organic systemic changes. Only one-third have symptoms which are entirely organic in nature and origin.

The physician in private practice, therefore, who has psychiatric training, in addition to his formal medical training, is concerned largely with the foregoing patient. He utilizes the psychosomatic approach in therapy. From this we have derived the term and the specialty of psychosomatic medicine. The latter, therefore, deals with the normal person who has symptoms and somatic complaints, which are not imaginary, but due to a nervous condition.

Discussion of therapy in this particular field would cover a large range of subject matter and various types of therapy. Subject matter would include psychogenic asthma, neurodermatitis, peptic ulcer, hypertension, psychoneurosis and the affective disorders or "nervous breakdown." The therapy would include the administration of medicine and symptomatic treatment, psychotherapy, electroshock therapy and the removal of psychogenic and etiological factors.

* From the Psychosomatic Service of the Eastern Maine General Hospital, Bangor, Maine. These patients were treated at the Gay Private Hospital, Bangor, Maine.

This is a very important field in the practice of medicine. It is hereby referred to in order that it may be called to the attention of every physician that the doctor with psychiatric and medical training in private practice deals almost wholly with the normal person who is nervous, and not the insane or psychotic individual; also in order that the medical profession may realize its importance and familiarize itself with the psychosomatic approach and therapy for the welfare of the patient, inasmuch as two out of three patients will have all or many symptoms which are psychogenic in origin.

In this paper the writer will confine himself to a discussion on the present status of electroshock therapy and the results obtained in a series of 171 cases, selected at random from his files. These results were obtained by electroshock therapy, in addition to an adequate program of psychotherapy.

I believe that two facts are of importance before discussion of the treatment is started. First, that these patients all voluntarily entered a private hospital,* and of their own volition accepted treatments. Secondly, they are all of the average income group, all of moderate means. As private patients they could not afford prolonged hospitalization. Their average stay in the hospital was twenty-one days, as compared with ninety or more days in many public institutions. They also avoided all complications as might arise in their home and work, that they might otherwise have had due to loss of income from being ill and of being committed to a public institution. Some patients, in fact, were treated on an out-patient basis, although it is much more desirable to have the patient actually hospitalized when receiving treatment.

In the past few years the most prominent and outstanding somatic procedures in psychiatry have been insulin shock treatment, Meprofol and electroshock convulsive therapy.

Insulin, hypoglycemic or coma method of therapy was first introduced by Sakel in Vienna in 1928. He presented his first report from the University clinic in 1933. This treatment is still in use in larger hospitals where a sufficient number of personnel and facilities are available. However, in retrospect and recapitulation, in over a decade of use in thousands of cases, this form of therapy is believed to be of definite value only in Schizophrenia. The best results

* Gay Private Hospital, Bangor, Maine.

or improvement are obtained in cases of Schizophrenia of less than six months to one year in duration. Results of insulin therapy have been disappointing and have not met up with the initial expectations. However, the results obtained would seem to justify its continued use in Schizophrenia, although in many hospitals and clinics its use has been replaced by electroshock therapy.

Metrazol pharmacologic convulsion therapy was introduced by Von Meduna in 1934, when he reported on the attempt to treat Schizophrenia with artificially induced epileptic convulsions by intravenous injection of Metrazol. With this therapy the patient has a feeling of fear, of impending death and dissolution between the time of the injection and the convulsion. At times no convulsion takes place, but nausea, anxiety, restlessness and fear may continue for hours. Metrazol therapy has largely been replaced by electroshock therapy in most hospitals because of these effects on patients and the superiority of results and ease of administration that pertains to electroshock therapy.

Electroshock therapy was introduced by Cerletti and Bini in Rome, Italy, in 1938. It was developed after extensive experimentation. It has many advantages over other forms because of the simplicity and technical ease with which it is administered. The patient has an amnesia for the treatment. There is an immediate loss of consciousness, and as a result the patient does not fear the treatment. It was originally intended to be used in Schizophrenia, but has since been found to be of more and greater benefit in all of the affective psychoses. Its efficacy in Schizophrenia is not as marked as was originally hoped for. However, electroshock therapy has proven its usefulness as a therapeutic agent, and is now widely used with excellent results.

Its use is invaluable in all hospitals for the treatment of nervous and mental diseases. Chronically disturbed patients who are aggressive, destructive, uncoöperative and difficult to supervise are frequently made much more amenable to discipline, to other therapy and hospitalization. Also, its use effects a recovery and shortens the period of hospitalization in innumerable patients who otherwise might never recover, or who would require months of hospitalization, instead of the several weeks that is necessary when they receive electroshock therapy. Above all, it is of great value to the physician who is trained and experienced in its use in private practice to employ in the treatment of nervous and mental conditions. These patients will benefit and recover from their illness in a few weeks with a few treatments, given in a private hospital or administered on an out-patient basis. It is estimated that one out of twenty people will have to be hospitalized at some time or other for a nervous or mental dis-

order. How fortunate it is for this type of patient to receive treatments and recover in three or four weeks without having to be committed to a State institution. It represents a great saving to the State, and it alleviates much mental anguish and suffering on the part of the patient.

I have used electroshock treatment for the past seven years, both in public hospitals and in private practice exclusively for the past four years. This form of therapy is indicated in Schizophrenia, Manic Depressive and Involutional Psychoses and certain types of psychoneuroses. In Schizophrenia the results have not been very favorable unless the disease is treated in its acute and earliest stages. In the simple hebephrenic and paranoid types of Schizophrenia very little in the way of lasting improvement or recovery can be achieved. However, in the catatonic type of Schizophrenia, if treated in its earliest stages, electroshock therapy may be and often is highly beneficial.

Treatment of Schizophrenia requires from twelve to twenty convulsions as a minimum, given three times a week. The writer has had little success in the treatment of Schizophrenia, and this is in accordance with the results of other workers. The basic value of electroshock therapy in Schizophrenia is controversial at the best.

In the affective disorders, the Manic Depressive Psychosis, electroshock therapy is extremely valuable. Practically every patient in a depression recovers. The majority of cases require from four to six treatments, one every other day. The manic and hypomanic excitement and elation are frequently improved or a recovery is affected, but the result is not quite as good as in the depression, and requires from four to twelve treatments. A patient in an acute manic excitement may receive two or three convulsions daily for two or three days, then one daily or every other day, until improvement or recovery ensues.

Electroshock treatment does not prevent recurrences of a Manic Depressive reaction, but does effect a remission in the present acute attack. The writer has treated cases of chronic excitement with fair success. One patient had been in a state of manic excitement and hospitalized for four years. Over a period of several months the patient was given three series of ten or twelve treatments each time. A complete recovery was effected and today, six years later, the patient is still living a normal useful life in the community.

In the involutional states electroshock therapy in the depressed type is effective in 90% to 95% of the cases. The writer treated one case, a female who had been hospitalized for eight years with involutional melancholia. She recovered with a series of eight treatments. Treatment is given every other

day for six to eight treatments, and in practically every case effects a recovery.

It is a very common occurrence, and very dramatic it is, to treat a patient who is severely depressed, agitated and suicidal with a few electroshock treatments, and have them a perfectly normal functioning individual in two or three weeks. It is one of the greatest satisfactions of life that the writer is fortunate enough to experience.

In the paranoid type of involutional melancholia the patient is not benefited as dramatically by electroshock therapy as the depressed type. It requires more treatments, average six to twelve, and the results are not as satisfactory. Frequently they do not respond. They have to be hospitalized for a longer period of time, and have to receive a longer series of treatments.

Presenile depressions also respond favorably to electroshock therapy. The author has treated several patients seventy years of age with excellent results. Treatments were administered every other day and generally four to six were required to obtain desired results.

In psychoneurosis, electroshock therapy is of benefit in certain types only. Practically all of the reactive depression types recovered with treatment. In many cases of anxiety state with insomnia with specific etiological causes in the earliest stages, treatment is of benefit. In several cases of psychasthenia with compulsions good results were obtained, while in some cases with the same diagnosis no benefit was derived. Again treatment averages from four to six.

Some of the above depressions were due to alcoholism and some were a post-partum depression in origin. Regardless of etiology, the patients definitely benefited from treatment.

The technique of treatment is of little importance to the average physician, since this form of therapy can be administered only by a specialist. However, it would be of interest to know something of the details of administration of treatment.

Prior to the institution of electroshock therapy a general physical examination, including a complete blood count and urinalysis is done. If the patient is in good condition, and there are no contra-indications, electroshock is instituted. In cases where there is any question X-rays are taken and also an electrocardiogram. If the patient's general physical condition had been neglected due to his illness prior to hospitalization, they are tube fed and appropriately built up physically before treatments are administered.

A standard electroshock therapy machine (Davis, Waltham, Mass.) is used, and makes provisions by various meters to apply sixty to seventy volts (to 120 if necessary) of alternating current with a milli-

amperage of one hundred and sixty to two hundred and fifty for three-tenths of a second. There is also a meter to determine the amount of resistance offered to passage of the current through the skin and skull, etc.

The patient is treated in the morning before breakfast. He is given pre-treatment medication; Metrazol 2cc. as a respiratory stimulant, Coromine 1 cc. as a circulatory stimulant, Atropine, grs. 1/100 to prevent central vagus stimulation, to overcome nausea and to dry up pulmonary secretions. This is given immediately prior to treatment intramuscularly.

The skin of each temporal fossa is cleaned with a mixture of Acetone and ether to remove skin oils and an electrode salt paste is applied to the skin. Then a round metal electrode is applied and held to each temporal fossa by means of a rubber head band. The wires are clipped to the electrodes.

The patient lies on a bed with boards beneath and on top of the mattress with three or four sand bags beneath the back to hyperextend the spine. A rubber mouth gag is placed in the mouth. The head is held and the jaws are held firmly together by nurses. Four other nurses assist by each holding an extremity, so that no fracture may occur.

The convulsions are similar to an epileptic fit and are anywhere from ten to fifty seconds in duration. The seizure is followed by a coma of short duration from which the patient awakens in a state of mental confusion, which may last from five to thirty minutes. Occasionally the patient complains of a headache, of muscular pain and dizziness following treatment.

During the course of therapy the patient becomes mentally confused and has definite memory impairment. Generally they do not show much change or improvement until after the third treatment. The memory impairment may last from two weeks to six months, in the majority of cases clearing up in two or three weeks. The patient has amnesia for the treatments and is also unable to recall various delusions and incidents that occurred during the treatments or period of hospitalization.

Complications may arise during the course of treatment. One has to weigh the risk involved before administering treatments. If the patient has a physical impairment which is a definite contra-indication, it would be foolhardy to give the treatments. However, if there is a relative risk involved, but a greater risk in not giving treatments, such as the patient committing suicide, being psychotic for a long period of time, or dying because of refusal of nourishment, then treatments should be administered with due caution, if the situation looks fairly favorable. The decision rests with the physician administering treatments.

Complications which might arise could be fracture, dislocations caused by muscular contractions, such as fracture of femur, acetabulum, of the arm, scapula, spine (compression of vertebrae), dislocation of the jaw. Respiratory arrest, central in origin, may occur.

Active tuberculosis is contra-indicated, but patients have been treated, and even those having pneumothorax (Kalinowsky). Cardiovascular complications, if severe, may contra-indicate treatment. Occasionally cardiac arrest due to central vagal stimulation occurs, but giving Atropine prior to treatment serves as a prophylactic measure. Patients with auricular fibrillation have been given Quinidine, 12 grs. daily, and treated just the same.

Fatalities are very rare. It is estimated that in approximately one out of one thousand cases something happens. Necropsy findings usually are meager and most deaths are due to cardiovascular complications.

Contra-indications for electroshock therapy are few. An epileptic fit is merely being induced by electric stimulation. One can roughly say that any condition where having an epileptic fit would cause complications or death would be a contra-indication of treatment.

Age is of some importance, but patients have been treated in the eighth decade of life with no serious

consequence. I personally have treated several patients seventy years of age with excellent results.

Absolute contra-indications are organic cardiovascular disease, febrile disease, patients who have been bedridden for prolonged periods of time with general debility, hypertension (the writer has treated several cases with blood pressure as high as 250/140 with no untoward results), aneurysm of aorta, coronary disease.

Relative contra-indications are pregnancy, although people who are pregnant have received treatment with no harm to mother or fetus, exophthalmic goitre and Graves disease, tuberculosis and bone disease. Patients with bony atrophy and Paget's disease have been treated by using curare to stop convulsion. Organic brain disease is a contra-indication, but patients have been treated who have Parkinson's disease and general paresis with good results and no reactions. However, in vascular diseases of the nervous system one has to be careful. Brain tumor and other conditions with intracranial pressure is a definite and absolute contra-indication. Also, patients with peptic ulcers should not be treated, because it may lead to a severe hemorrhage during treatment. Patients with diabetes have been treated successfully. In any organic condition, such as senility or advanced arteriosclerosis, treatments would not, for obvious reasons, be indicated or of any value.

TABLE 1
Electroshock Therapy
171 CASES TREATED OVER A FOUR-YEAR PERIOD

Type	No. Treated	No. Recovered	No. Improved	No. Relapsed	No. Unimproved
Manic-Depressive Psychosis					
Depressed	89	82	6	1 (State Hosp.)	0
Manic	14	11	0	3	0
Involutional	3	3	0	0	0
Hypomanic	5	5	0	0	0
Involutional Melancholia					
Involutional Melancholia	36	31	4	1 (State Hosp.)	0
Paranoid Type	1	0	0	0	1 (State Hosp.)
Psychoneurosis					
Anxiety State and Reactive Depression	7	5	2	0	0
Psychasthenia	3	2	1	0	0
Neurasthenia	3	2	1	0	0
Mixed Type	1	0	1	0	0
Schizophrenia					
Paranoid	6	1	4	0	1 (State Hosp.)
Simple	1	0	0	0	1 (State Hosp.)
Catatonic	1	0	0	0	1 (State Hosp.)
Hebephrenic	1	0	0	0	1 (State Hosp.)
Average age of patients treated					38
Average number of treatments					5.5
Number of male patients treated					43
Number of female patients treated					128

It is of interest to note that three of the patients in the series required what is known as Maintenance treatments. Two women in their fourth decade have periods of depression which last approximately six months. Electroshock therapy is administered when they enter their period of depression. This shortens these periods of depression and hospitalization, but has not prevented recurrence of the depression. Another patient sixty-nine years of age has been depressed periodically for the past eight years and has been treated in another state by Kalinowsky and by the author during the Summers in two depressions and received six treatments each time. The man has had approximately one hundred and fifty treatments. He has carried on his profession as a lawyer. Each time he becomes depressed he is suicidal and has made various attempts on his life. The treatments have helped him to lead a normal life the past eight years. There are cases in literature that have received as many as two hundred and forty-eight convulsive treatments over a period of years with no damage to brain or intelligence.

As far as is known at the present time no brain damage results from electroshock therapy.

As to how the treatments effect a recovery is unknown. It operates on a symptomatic rather than an etiological level. They are given on an empirical basis. Some theories are that the treatments produce cerebral anoxemia. Another is that it is the new associations and pathways that are broken down, while the more fixed and traveled pathways and associations over periods of years are left untouched.

If the patient has a definite Schizophrenic reaction which has been of long duration, then electroshock therapy is of little avail and hospitalization is advised in a State Hospital. If the patient is an acute manic, too aggressive, too uncoöperative and too acutely excited and disturbed to be cared for in a private hos-

pital, it is necessary for him to be admitted to a State Hospital where the proper facilities are available. However, practically all patients who have a depression can be treated in a private hospital or as outpatients and return home in a very short period of time.

In conclusion, one can readily appreciate the fact that electroshock therapy is here to stay. It is of great value, but is no cure all. It is of benefit in selected cases. Practically every patient in a depression recovers. The complications are rare and contra-indications as we see them daily are few. The author has been fortunate enough to have had no deaths or complications to date.

It is very important that nervous and mental disorders be recognized and treated early. As with all other forms of therapy, the sooner the patient is placed on treatment the more rapid and successful is his recovery.

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The tuberculous patient should receive more than one gram of protein per day, and the diet must supply enough calories to balance his energy requirements. The calories supplied by carbohydrates and fats must contribute to the total fuel value, in such a proportion that the calories from fats should not fall below 30% or exceed 40%. If the patient receives a diet adequate in all respects and supplying a sufficient amount of protein, it is very probable that his body will store proteins for his repairing needs, just as would be the case in an ordinary individual. —J. D. Adamson, M. D., *Canad. Tuberc. A. Tr.*, 1947.

To advocate the indiscriminate use of streptomycin, especially in moderately advanced or advanced cases of pulmonary tuberculosis, not only is premature but also carries with it certain dangers and drawbacks. Among the principal dangers in the use of this drug is its toxicity, which may seriously affect hearing, sight and kidney function and cause skin eruptions. At present, it can only be said that we have seen little in the treatment of well established pulmonary tuberculosis by streptomycin that gives cause for any great optimism regarding its curative value. — Comm. on Tuberc., N. H. Med. Soc., *New England J. Med.*, Oct. 23, 1947.

AN UNUSUAL CASE OF FOREIGN BODY*

J. E. WHITWORTH, M. D.

This case is presented because it has some unusual, some interesting and some instructive features not often encountered in the single case, yet useful over a wide range of cases presenting the problem of pulmonary pathology of possible foreign body etiology.

The patient, R. C. O., a sick looking boy of five years, was admitted to the Pediatric Service of the Eastern Maine General Hospital on August 21st.

The history was of an attack of pertussis of short duration during the first part of July, no whoop for the past three weeks, then of measles three weeks ago, accompanied with a rather severe sore throat. This was succeeded by what was locally diagnosed as an attack of pneumonia. The patient was given a full course of sulpha drug and the fever subsided and his condition improved so that he was up about his home again. However, after a week, what appeared to be a relapse developed, his cough which had not ceased, but just lessened, again returned with the raising of much mucus and yellow material. Again the patient received sulpha therapy for a few days, and again the fever lessened, but did not fully recede. This was followed by another cycle of increased fever and increased and productive cough. The patient was then sent to the Eastern Maine General Hospital, entering the Pediatric Service.

P. X. He was a pale, sick, wasted looking boy of five years, temperature 104 degrees, pulse 120, respiration 25 per minute. There was a moderately persistent cough, producing a fluid muco-purulent material with a slightly foul odor. The chest examination recorded marked dullness with diminution of respiratory sounds at the right base. The left border of the heart was one cm. inside nipple line. The lips were covered with herpes.

The X-ray of the chest recorded a marked increase in density in the lower half of the right lung field consistent with pneumonic infiltration of the lower lobe. The heart was not appreciably displaced.

Laboratory: Hbg. 12.0 gms. per 100 c.c., R. B. C.'s 3,880,000 per cm. Leucocytes 38,000 per cm. Lymphocytes 26%. Polymorphonuclear neutrophils 58%. Band forms 16%. Many of the neutrophils contained toxic granules. Urine negative. Sputum culture non-hemolytic streptococcus and staphylococcus aureus predominating with some colon bacilli.

No history that could have been construed as relative to foreign body inhalation could be obtained on first questioning the parents. However, Dr. Albert

Fellows, on whose service the child was admitted, persisted in his search for such a history and the mother returning three days later, gave the history that a child companion had related. It appeared that while at play in the field, the patient, who was still occasionally whooping, had a coughing spell, more violent than the usual and reportedly spat up some blood. The chart showed an elevation in fever. There was a very definite indication of increasing bronchial irritation.

At this time the case was first seen by me in consultation. It was agreed that bronchoscopy was definitely indicated in the search for possible foreign body. The following is the report.

The trachea and whole bronchial tree were acutely inflamed with a good deal of free exudate present, with the process much more marked on the right, increasing to a place in the branch bronchus, which divides to distribute to the postero-lateral and postero-medial segments of the right lower lobe. Here was found a mass of spicular organic material, bathed in exudate, closing the airway. This was removed with grasping forceps in a piecemeal manner, and at the end it seemed that the airway was clear and air was bubbling in and out of the exudate. This was aspirated quickly and the procedure terminated because poor condition of the patient demanded a limited time for manipulation.

The patient was returned to the ward and put on penicillin. The temperature dropped but the physical signs of dullness and lack of ventilation in the lung did not remain improved.

The X-ray. Comparative study showed homogeneous density in the right base still remaining. The heart was not appreciably displaced. Aeration in the rest of the lung fields was good.

Laboratory report on specimen. Specimen consists of two small blood clots and several small bunches of greyish, needle-like material. Microscopic examination, two slides paraffin, revealed a foreign body, apparently vegetable material, with many polymorphs, blood and fibrin.

The child's condition improved with antibiotic therapy and transfusion and I proceeded with a second bronchoscopy.

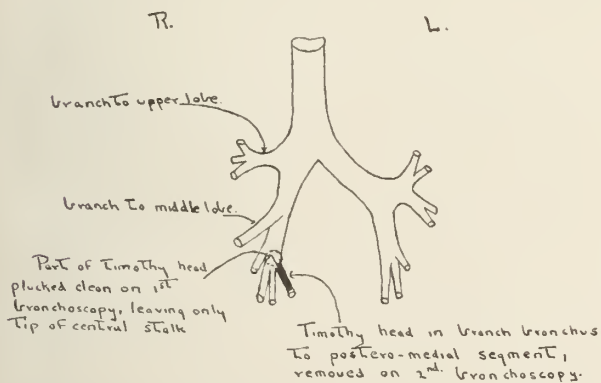
September 10th report. There still remained a great deal of bronchial reaction and after drying out the exudate as much as possible, search revealed a peculiar strand of firm nature, protruding from the branch to the postero-medial section of the right

* From the E. N. T. Service of the Eastern Maine General Hospital.

lower lobe. Grasping this, it was found to be firmly anchored and very considerable pulling failed to free it. This was worked on for some ten or twelve minutes and was finally dislodged, as the child forcefully inhaled to cough, thus enlarging the bronchus. It was removed in the scope. On being examined it was found to be the end of the central stem in a head of timothy, which was some two inches in length. By virtue of the little spines, it had crept along the bronchus with each respiratory movement until it had lodged so firmly in a third division branch that real tugging was required to free it. A foul odor followed its removal with the escape of foul exudate.

The reasons that the whole foreign body was not seen and removed at the first sitting may be seen in retrospect to be: 1. The child's condition did not permit more than a few minutes' scoping. 2. The position of the timothy head (Fig. 1). 3. No defi-

FIGURE 1



To illustrate the position in which the foreign body lodged in the right bronchial tree.

nite knowledge was had of what was being searched for. The foreign body was not radio-opaque and the history inconclusive. After this procedure the following notes appear.

September 19th. Temperature normal, patient out of bed. There are still numerous rales at right base. X-ray: right lung, rapidly clearing.

September 22nd. Discharged to return for check up in two weeks.

October 4th. Return examination. Expansion of

lung much improved. Breath sounds distinct. Feels well. Good appetite, no cough, no fever. To have X-ray later.

COMMENT

This case was unusual because:

1. The rather rare type of foreign body.
2. Its inhalation resulted from the spastic paroxysm of cough, the result of a recent pertussis in a child at play.
3. The complicating occurrences of pertussis preceding, and measles and tonsillitis following the inhalation of the foreign body.
4. The length of residence of the foreign body in the child's lung, nearly eight weeks.
5. The manner in which the foreign body mechanically crept out and tightly lodged in a small bronchus.
6. The fact that a five-year old could inhale and retain such a large foreign body without more immediate distress and consequent attention.
7. And finally the apparent satisfactory and prompt recovery of the lung after removal and use of antibiotics.

The instructive features are perhaps the most outstanding and they are:

1. One should always remember the possibility of foreign body even if the history is lacking and especially in a chest that doesn't clear.
2. If there is any history, bronchoscopic examination is a must, especially if any signs are present, because a very great number of foreign bodies are not radio-opaque.
3. It might also be stated that the history of possible foreign body with a coughing attack requires a bronchoscopy even if the X-ray is quite negative.
4. The use of antibiotics, etc., greatly helps in treating the complications, but may, as here, mask their true significance.

This case is presented from the standpoint of interest in something out of the usual run. There may have been other methods of handling a like situation and the matter lies open to discussion.

Although tuberculosis is extremely serious in infancy, the disease is relatively mild later in childhood. It is also true that the treatment of children with a primary complex, such as that afforded by a sanatorium, has no effect on the development of progressive tuberculosis in later life.—Joseph D. Wassersug, M. D., *New England J. Med.*, July 13, 1947.

A rehabilitation program in a sanatorium is a plan of treatment to counteract the psychosomatic effects of the disease, tuberculosis. In such a program physical retraining, mental and social readjustment are essential and, as an adjuvant to these, vocational training is valuable.—A. N. Aitken, M. D., *Am. Rev. Tuberc.*, Jan., 1947.

EPHEDRINE AND NOCTURIA*

MARTYN A. VICKERS, M. D.

The use of many drugs in medicine has resulted in their proven value through years of adequate clinical trial. With present day knowledge of the chemical structure of our newer drugs, their effects can nearly be predicted although a thorough clinical trial is necessary for their final evaluation. In spite of these newer medications, one must not forget the older drugs where such clinical trial has shown their value in treatment.

This is particularly true of Ephedrine in the treatment of disease and more especially in the treatment of allergic diseases such as asthma. It was through its use in such treatment that an important clinical fact was revealed. A review of many records showed that numerous patients (male) suffering not only from asthma but from nocturia, from two to several times seemed to have an increase in this symptom after being given Ephedrine for symptomatic relief of their asthma and several patients found it necessary to have prostatic resection via the urethral or abdominal route to relieve their acute retention. These were patients who, I feel sure, would have needed such surgery later — but this was no doubt hurried by their Ephedrine and possibly a more extensive procedure was necessary.

It would appear that sufficient mention is not made of this apparent clinical fact in discussing Ephedrine in the literature. It is mentioned as occasionally causing urinary retention.^{1,2} The point which I would like to make here is that in the face of nocturia in male patients, the giving of Ephedrine should be done with care and the necessity to forewarn the patient to stop his medicine in the event of an increase in his nocturia symptoms.

The well-known side effects of Ephedrine such as nervousness, palpitation, insomnia, trembling, general weakness, precordial pain, etc., are too well known to necessitate further discussion. Rare cases of dermatitis medicamentosa have been reported. This, plus the urinary retention symptoms, is the only one which requires the complete withdrawal of the drug. Other symptoms may be controlled by the use of atropine, sedation, etc.

SEVERAL CASES IN POINT

This white male, 68 years, with asthma for ten years, complained that during the past three years he has noted an increase in nocturnal frequency two to

five times. Testings were started and he was given Ephedrine, 50 mgm. t.i.d., for symptomatic relief. The patient did not return for his appointment, but was admitted to the hospital for acute retention. The second day after starting Ephedrine, a supra pubic prostatectomy (2nd stage) was performed with an uneventful recovery.

This white male, 54 years, with bronchial asthma for five years, complained of nocturia three times. He was given Ephedrine, 50 mgm. t.i.d. for symptomatic relief and within twenty-four hours the nocturia increased. He was advised to stop medication, and the nocturia returned to previous frequency.

This white male, 61 years, with asthma for twenty-four years, complained of nocturia twice for the past two years. He was given Ephedrine, 50 mgm. t.i.d., for relief of his asthma and his nocturia increased to five or six times. Medication was withdrawn and the nocturia returned to the previous status within thirty-six hours of the withdrawal of the drug.

This white male, 72 years, complained of asthma periodically since childhood with the latest onset ten years ago. He also has nocturia of four to six times. Ephedrine, 25 mgm. 2 I. D., was given for the relief of his asthma. After the fifth dose, acute retention developed, the drug was withdrawn, and atropine and sedation was given, plus one catheterization due to bladder distention. The bladder function then returned to the previous status.

CONCLUSION

(1) Ephedrine is a valuable drug with some undesirable side effects.

(2) Ephedrine should not be given to older males who are suffering from nocturia.

(3) The value of a history when treating any disease becomes more evident as time goes on.

(4) Do not expect newer drugs such as anti-histamines to replace Ephedrine in the treatment of asthma. Their value is not to be denied, but Ephedrine still has its proper place and use.

* From the Allergy Service of the Eastern Maine General Hospital.

1. Practice of Allergy, Vaughn, pp. 9, 13.
2. Clinical Allergy, Tuft, p. 115.

LESS SODIUM AND MORE WATER*

WILBUR B. MANTER, M. D.

When intravenous fluids are indicated, the decision as to what quantities of water and of sodium chloride are to be given may be difficult. The body needs for electrolytes are so well appreciated that there is sometimes a tendency to give sodium chloride too freely, rather than too sparingly. On the other hand the water requirements of the sick patient may be high. By reviewing some older and incorporating some newer concepts, the contention is to be supported that, for most patients, water should be administered in at least adequate and sodium in no more than necessary quantities. The laboratory does not provide specific guides as to these quantities. Butler's statement¹ is appropriate: "... the prescription of the rate of infusion and the composition of parenteral fluids for a given patient must reflect common sense, careful clinical observation and a tolerance indicative of an enlightened awareness of ignorance." Selecting an electrolyte solution other than sodium chloride is not the common everyday problem; electrolytes other than sodium will not be considered here.

General Considerations: (a) Body Water

The body by weight is 75% water. This water exists mainly in a dynamic equilibrium in two major compartments. The larger compartment, the intracellular, normally contains 75% of the body water. The second, the extracellular, contains the remaining 25%, and for practical purposes is divided into two subdivisions, the interstitial compartment containing 17% of the body water and the intra-vascular (circulating blood) containing 8%.

Water in leaving the body performs two principal functions: (1) the dissipation of the body heat by vaporization through the skin and lungs, and (2) the carrying out of waste products.

The usual daily loss of water for vaporization by a normal adult through the skin and lungs is about 500 cc. In disease, especially with fever, this may increase to 2000 cc. or more. Other daily abnormal losses as by vomiting, diarrhea, through wounds, fistulas and tubes, and body water deficit or "dehydration" from previous losses are to be estimated. In the development of severe dehydration a 150 lb. person loses about 4000 cc. of body fluid.²

The water required by the kidney to eliminate waste products from the body is for the most part available only after these previously mentioned losses

are met. A 1500 cc. daily urine output is desirable for the sick patient. Hence, the daily amount of water to be administered will be a quantity sufficient to meet the losses mentioned plus 1500 cc. for urine excretion.

(b) Sodium

Of the inorganic electrolytes in the body, it is the cations or base ions, mainly sodium and potassium, that are important in exerting osmotic pressure effects. Sufficient base to closely approximate a definite concentration in body water must be present for water to be held within the body or within a particular compartment. Sodium is the principal base ion present in the extracellular compartment, the compartment mainly concerned in the problems under discussion.

6.0 gm. of sodium chloride is sufficient to meet normal daily requirements for sodium.³ This amount allows for that usually excreted through skin, bowel and kidney. Additional sodium will be needed to replace that contained in the abnormal fluid losses mentioned above. Sweat is considered to be 0.2 to 0.5% sodium chloride. Most other abnormal losses usually are considered as isotonic electrolyte solutions. Dehydration also represents loss of isotonic fluid.

Discretion must be used in planning for the replacement of the electrolyte losses of severe dehydration. Otherwise the equilibrium of water and electrolytes that the body maintains in its compartments during the process of dehydration may be seriously upset with disaster resulting.

Special Considerations

The volume of water given is not particularly limited by cardiac or renal insufficiency, except with renal shutdown or block and in instances where blood pressure is at shock levels. The edema of nephritis has been treated with large volumes of water³ and Schemm⁴ in his high fluid intake in the treatment of edema, especially cardiac, demonstrated that patients in severe cardiac failure, even with accompanying gross impairment of renal function, could handle up to 5000 cc. or more of water daily given intravenously as glucose solution. With impaired renal function, it is actually more important to be certain that sufficient water is given. The kidney normally is required to excrete 35 to 40 grams of solid waste material per day⁵ and this requirement may be higher for the sick patient. The table shows the volume of

* Read before the Bangor Medical Club, April 27, 1948, from the Department of Medicine, Eastern Maine General Hospital, Bangor, Maine.

urine necessary for the kidney to excrete 35 grams of waste solids according to its ability to concentrate.

MAX. CONC. ABILITY OF THE KIDNEY	MIN. H ₂ O TO EXCRETE 35 GMS. OF SOLIDS
1.032—1.029	473 cc.
1.028—1.025	595 cc.
1.024—1.020	605 cc.
1.019—1.015	850 cc.
1.014—1.010	1439 cc.

(From F. H. Lashmet and L. H. Newburg.⁵)

As has been mentioned, for water to be retained in the body, sufficient base must be present. The ability of the body at the kidney to vary base excretion according to need is the determining excretory factor in the regulation of body water volume. Although some base must be excreted with the urine in order for the kidney to fulfill its functions, the kidney can remarkably conserve sodium except in some instances of advanced renal disease. When edema fluid is present, large amounts of base are available in the body for renal excretion needs and are expended to the body's advantage.

The kidneys more often may not be able to excrete sufficient base to keep up with excessive intake. Consequently, water will be retained with the base to increase body water volume. The deleterious effects under various circumstances will not be discussed except to mention the potential danger of increased intravascular fluid or blood volume to the patient with limited cardiac reserve, and the impairment of vital organ function and of wound healing that may be attributed to increased interstitial fluid volume, which may or may not be manifest clinically as edema.

Patients with limited cardiac or renal reserve must be considered carefully. When cardiac output decreases, blood is said to be specifically diverted away from the kidneys to meet other needs. With the resulting reduction in glomerular filtration pressure, there is retention of sodium. Water consequently is retained resulting in increased extracellular volume. This newer concept of "forward failure" of the heart^{6,7} serves to emphasize the hazard of promiscuous sodium administration to older patients, as well as to patients with known cardiac disease. Additional sodium should not be given to patients who have edema complicating renal disease. The intractable edema of the "nephrotic syndrome" is associated with the retention of an excessive amount of sodium.

Much has been written about post-operative salt intolerance. Immediately after major surgery, fluid tends to be retained, sometimes to the point of frank

edema, and sometimes with signs of serious derangement of body functions.⁸ It has been stated that from a surgical standpoint the routine parenteral administration of 5 to 9 grams of sodium chloride daily, when there is no abnormal loss of salt, may be excessive and in certain instances delay recovery. In fact, a slight deficit in extracellular fluid volume may be preferable to any excess especially in the immediate post-operative period.⁹ It well may be that the body is less tolerant of salt while under any severe stress, be it after major surgery or with severe acute illness. Hans Selye¹⁰ cites evidence for increased adrenal corticoid activity while the body is combating the effects of disease or injury. The salt-active corticoid adrenal hormone is known to cause salt retention in the body.

Furthermore, with excess concentration of sodium in the extracellular compartment, water may be drawn from the intracellular compartment to restore isotonic equilibrium when sufficient water is not otherwise available. Studies on the effects of giving 3000 cc. of isotonic sodium chloride intravenously to essentially healthy young adults after relatively minor surgery have been done.¹¹ In order to maintain electrolyte balance in the extracellular compartment of these patients, it was inferred that 2000 cc. of water was transferred from the intracellular compartment. Although it is unknown how much dehydration the cells can undergo before function breaks down, the brain cells are especially sensitive to variations in water content and the disorientation, so often seen in cases of salt intolerance, may be a symptom of the fluid shift.

SUMMARY

The quantity and distribution of body water are described and water and sodium functions are discussed. A patient without deficits to replace and with no abnormal losses of water or salt may require 6.0 gm. of sodium chloride and 2000 cc. of water daily. This in terms of the usual intravenous solutions will be 600-700 cc. of 0.9% sodium chloride and the rest as water with a non-electrolyte solution such as 5% glucose solution. Circumstances are stressed where less sodium and more water are indicated.

In general, the kidneys handle water well, even if they themselves are diseased or if there is cardiac insufficiency, but base may not always be well handled especially when there is limited cardiac or renal reserve. Under these circumstances, excess sodium may be retained. It is further suggested that excess sodium retention may also occur whenever the body is under severe stress, be it after surgery or with medical disease. Excess sodium retention

Continued on page 365

CARCINOMA OF THE PROSTATE TODAY*

JOSEPH MEMMELAAR, M. D.

The urologist of today is conscious of an increase in the number of patients afflicted with carcinoma of the prostate. There are some known reasons for this, not the least of which is that man today is living longer than he did a decade ago. This permits many cases of carcinoma "in situ" or "occult" carcinomas of the prostate to become clinically evident. More definite diagnoses are being made by the clinician and the pathologist is more energetic in his survey of operative specimens. Baron and Angrist report that in a series of fifty consecutive prostates which were taken from autopsy specimens above fifty years of age and serial sections made of these, that forty-six per cent were found to have carcinoma. These did not represent clinical carcinoma to be sure, but many investigators assure us that twenty per cent of men over fifty who have prostate trouble have clinical carcinoma of the prostate. It has been reported that carcinoma of the prostate is three times as common as any other carcinoma in the body. The routine operation for removal of prostatic obstruction i.e. enucleations are no guarantee that these patients will not develop carcinoma of the prostate. It is common knowledge that enucleations do little more than remove adenomatous or fibrous obstructions and permit the true prostatic tissue which has been compressed into a "surgical" capsule to remain.

It is in this capsule that carcinoma develops. In a recent survey it was indicated that ten per cent of patients who originally had an enucleative procedure returned with carcinoma of the remaining prostatic tissue or capsule.

It is obvious that urologists are presented with a problem of great moment. To date our answer has been primarily one of palliation. A few have made energetic attempts to find an acceptable operative procedure which would effect a cure of early cases. Most prominent in this field was Hugh H. Young who perfected a perineal approach for a total prostatic-vesiculectomy. However, this operation never became popular with the average urologist and few could obtain formal training in the technique. As a result the treatment consisted of providing a "tunnel" through the obstructing neoplastic tissue by the use of the "cold punch" operation or more recently by the use of the high frequency current and resectoscope. In 1941, the work of Charles Huggins was reported which consisted of a series of cases of malignancies of the prostate in which bilateral orchiectomies were performed. Huggins noted in many

instances that bony and other metastases apparently had disappeared after this procedure. Also many of the primary sites had decreased in size and had become softer in consistency. Accompanying these changes subjective improvement was very noticeable and a gain in weight with improvement of appetite had occurred. Following this it became evident that androgens appeared to be the factor which when decreased either by orchiectomy or suppression with estrogenic substance caused the desirable effects.

It was noted that the adrenals produce certain amounts of androgen which orchiectomy doesn't apparently affect and, therefore, many physicians use estrogen in combination with orchiectomy. To date orchiectomy as a treatment by itself appears to give better results than estrogen therapy alone. It is important to remember that no claim of cure of carcinoma of prostate by this hormone adjustment is being made by any investigator—rather, the indications are that it may cause regression in some instances and in others it has a deterrent action, while in approximately thirty to forty per cent no affect is seen.

Until an isotope is developed, or a chemical is found to act effectively, it remains as in other organs that carcinoma of the prostate may be cured only by *early total removal* of a suspicious prostate or by total removal of prostates in males who are in the "prostate age" who require surgical treatment. The one important consideration is that unless the male is sexually indifferent his sexual function will most likely be sacrificed. I do not advocate prophylactic surgery, but do stress the need for a more complete treatment of the patient who must have surgical treatment of his prostate. This would favorably influence the ten per cent who return with carcinoma of the prostate on whom an "enucleation," had previously been performed.

The total removal of the prostate may be done according to the principles suggested by H. H. Young by the perineal route, or by the retropubic route. I have personally found the retropubic route to be the easier approach which offers a short period of hospitalization and a minimal morbidity. The retropubic route does not allow for easy biopsy. However, it has been my experience and the experience of others that frozen sections of suspicious tissue very often do not allow the pathologist to make a definite diagnosis and the report is returned as still "suspicious." It, therefore, would be a rational conclusion that the operating time utilized in waiting for such a report

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THE TREATMENT OF POSTOPERATIVE PULMONARY ATELECTASIS*

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Though the treatment of postoperative pulmonary atelectasis has been the subject of numerous articles in recent years, the importance of early conservative therapy for this condition has not been sufficiently emphasized. All too often one sees atelectasis treated with watchful expectancy by the physician, and with carbon dioxide and oxygen administered by the nursing personnel. Such a program implies a lack of examination of the patient because it is easy to order this therapy for any early postoperative temperature elevation. It is the purpose of this paper to point out that atelectasis is a serious postoperative complication which must be diagnosed early, but which when vigorously and quickly treated, can almost always be cleared by conservative measures.

There are several theories for the cause of atelectasis. These may be listed:

1. Irritation of anesthetic vapors, i.e. ether.
2. Inhalation of infectious material, i.e. saliva and vomitus.
3. Emboli from the operative field.
4. Reflexes from the operative field.
5. Pressure changes in the intrapleural and intra-abdominal spaces with elevation of the diaphragm.
6. Excessive bronchial secretions.
7. Restricted respiratory excursions from pain, binders, narcotics, etc.

Regardless of which one of several theories may apply in the causation of atelectasis, there appear to be several important factors which must be considered in the treatment. There is either an absolute or a relative increase in the bronchial secretions. The ciliary and cough mechanisms may be depressed, and thus an even normal amount of secretion is not cleared from the bronchial tree. Narcotics depress both these mechanisms. The patient with a painful abdominal wound is reluctant to cough and raise the usual amount of mucus. Depth of respiration and vital capacity are curtailed after abdominal surgery. Binders tend to enhance the respiratory difficulty. The respiratory muscles (diaphragm, intercostal and abdominal muscles), particularly on the side of the abdominal wound, are splinted because of the pain induced by their movement. Mucus becomes inspissated and may plug one or more bronchi. It is unknown whether the mucus plug forms first and collapse of a whole or a portion of the lung follows, or

whether the plug is secondary to the collapse and cessation of aeration of the part. In any case, this obstruction to the lobules or to the lobes must be cleared. On auscultation of the chest in these patients, one often hears the expiratory wheezes of bronchospasm, especially on the side of the atelectasis. The spasm may be secondary to the mucus acting as a foreign body in the bronchi, or it may result from a reflex from the operative site and be primary in the shutting off of the bronchi. This bronchospasm must also be treated. Thus, the important factors to be considered are the bronchi plugged with mucus, bronchospasm, and decreased respiratory exchange due to pain, binders, narcotics, etc.

The clinical picture of atelectasis is usually not difficult to recognize. It should be realized that it is one of the most common causes of fever in the first few postoperative days. X-ray of the chest, though a useful adjunct to diagnosis, is frequently unnecessary, and because of the delay in therapy which it may cause, is often inadvisable in the hypoxic patient before treatment is instituted.

If a large area of the lung, such as one or two lobes, suddenly becomes atelectatic, the patient experiences dyspnea, cough, cyanosis, and perhaps circulatory collapse. The temperature, pulse and respiratory rates rise rapidly, and the patient appears acutely ill. The trachea and the mediastinum may be deviated toward the affected side of the thorax, which shows a lag with deep inspiration and narrowed intercostal spaces. At the onset there is dullness or flatness, absent tactile fremitus, voice and breath sounds, but usually no rales. Within a short time, however, moist rales appear. If the atelectasis is "spotty" or lobular, the signs are much less definite. There is a moderate elevation of temperature, pulse and respiratory rates. Cyanosis is slight, but cough is frequently present. The signs are often minimal on percussion and auscultation of the chest. There may be dullness, diminished breath and voice sounds, and rales are often heard. The clinical picture is easily confused with bronchopneumonia, which quickly follows if the areas of collapse are not cleared. It should be borne in mind that in spite of the fact that the obstructing mucus may be expelled from a bronchus, sometimes the atelectasis is not immediately cured but the signs may change. With the bronchus open and with persistent collapse, the signs may be those of solidification. There is dullness, increased or normal tactile fremitus, often

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bronchial breathing and bronchial breath sounds. Moist rales may be heard. This picture has been mistaken for lobar pneumonia.

Most articles on the therapy of atelectasis propose that conservative measures be tried first. However, in the majority of the articles, bronchoscopy is advocated as the ideal method of therapy which should be employed after a few hours spent on conservative measures. While it is true that immediate bronchoscopy will clear practically every case of atelectasis, many smaller institutions do not offer this special service, and conservative measures must of necessity be employed. It is our experience that atelectasis can be cleared, when diagnosed early, in almost 100% of cases without resort to bronchoscopy. The patient is spared the distress and expense of another procedure.

Besides general supportive therapy such as oxygen administration by tent or nasal catheter, fluids, antibiotics, etc., certain specific procedures should be followed to eliminate this condition:

1. **COUGH:** The patient should be turned on the unaffected side, the wound supported with the palms of both hands, and the patient urged to cough. The patient must be told that he will experience rather severe pain but that the mucus must be coughed out of his tubes to avoid pneumonia. Some observers have suggested that the abdomen just below the diaphragm, rather than the wound, be supported to ease the pain on coughing.

2. **SAUER MANEUVER:**¹ If cough alone does not remove the obstructing mucus plug, then Sauer's maneuver is employed. A nurse supports the abdominal wound, and at the time of cough, the left fist placed over the affected area of the chest is smartly struck with the flat of the right hand. We prefer to lay the flat of the left hand over the area and strike it with the right fist to insure greater jarring without the pain of a blow. If the plug is not dislodged easily, and particularly, if the wheezes of bronchospasm are heard, 4 minims of epinephrin are administered subcutaneously. After 20 minutes, the patient is made to cough and the chest again thumped. In extremely hypertensive patients, aminophyllin is employed to advantage.² Patients state that it is much easier to raise the mucus and that breathing is much freer after a bronchodilator. Usually the Sauer maneuver will clear the collapse in the coöperative patient. However, there are not infrequent patients who refuse to cough and to whom this procedure causes such acute distress that they refuse further thumping. In these individuals it is advisable to anesthetize the area of the operative wound by intercostal block. They will then coöperate readily.

3. **INTERCOSTAL BLOCK:** Intercostal block at the posterior axillary line is a simple and effective method of eliminating wound pain. For incisions made at least one cm. from the midline of the abdomen, only one side need be blocked. Thus for an upper right or left rectus incision, as for gall bladder or gastric surgery, T-6, 7, 8, 9, and 10 must be blocked on the respective side. For lower abdominal incisions, such as one for a McBurney incision or one for inguinal herniorrhaphy, T-10, 11, 12, and L-1 must be anesthetized to eradicate the discomfort entirely. Midline incisions, as for hysterectomy, require bilateral blocking of T-10, 11, 12 and often L-1. After a cough, the patient can tell the operator whether it is necessary to block another segment. The technic of blocking these nerves is easily practised by the surgeon. Occasionally pneumothorax or a mild traumatic pleurisy will ensue unless care is used in performing the infiltrations.

Technic: The respective ribs are identified lateral to the iliocostalis lumborum muscle along a line drawn from the posterior axillary fold to the posterior superior iliac spine. A wheal is made with 1% procaine over the lowest rib to be blocked. A 4-inch 22 gauge needle is inserted down to the lower border of each rib, where 1 cc. is injected before striking the periosteum. The needle is then re-directed just beneath the rib, and advanced about ¼ inch through the fascia where, after careful aspiration, 5 to 10 cc. of the solution is placed. To anesthetize L-1, the wheal is extended caudad and the needle inserted a thumb's breadth below the angle of the twelfth rib to a depth corresponding to that used for blocking T-12. 5 to 10 cc. of procaine is injected and the needle withdrawn and redirected slightly upward, backward and medially to about the same depth. 5 to 10 cc. of procaine is injected. A larger amount of solution is employed so that the ilioinguinal and iliohypogastric nerves will be blocked by the drug as it diffuses through the tissues.

These patients are completely coöperative after a somatic block since visceral sensation contributes little to the discomfort produced by cough. The vital capacity is greatly increased and the splinting of the respiratory muscles is lessened. If the patient now cannot cough out the mucus, Sauer's maneuver is again tried. Should these measures prove unsuccessful, then it is wise to catheterize the trachea blindly.

4. **BLIND TRACHEAL CATHETERIZATION:**^{3, 4} Though blind tracheal catheterization may appear to be a technical procedure, it is easily accomplished after a little practice. The patient is placed in a semi-sitting position if possible and the head is held forward. He is instructed to breathe deeply through the mouth. A 16F. fairly firm catheter which has been

stored coiled is lubricated and a small hole is cut near the proximal end close to the glass adapter. Suction is then connected. During expiration the catheter is quickly advanced until it passes through the larynx into the trachea. Propulsive coughing heralds its presence in the respiratory passages. At times it is easier to insert it during inspiration. It frequently requires several attempts to pass the catheter through the vocal cords. The catheter is advanced 8 to 10 cms. if possible, and the hole at the proximal end alternately closed and opened with the thumb since the larynx closes about the catheter and the air may be rapidly sucked out of the lungs. Prolonged negative pressure may predispose to further atelectasis for there is little ingress of air past the spastic vocal cords. Sometimes it is necessary to catheterize the trachea several times before the coughing it produces raises the offending mucus.

5. CARBON DIOXIDE AND CARBON DIOXIDE-OXYGEN: Carbon dioxide exerts salutary effects upon the respiration and the tracheobronchial tree which may be of considerable assistance in the treatment of atelectasis. Carbon dioxide increases ciliary action, liquifies secretions, dilates the bronchi and stimulates their peristalsis, promotes cough, and increases the depth of respiratory excursions.

Since it has been shown that a carbon dioxide-oxygen combination is absorbed very rapidly from an occluded area of the lung,⁵ the use of this mixture is open to question. The deep respiratory excursions cause the peripheral alveoli to be filled with the gases. After the therapy, when the carbon dioxide has been blown off through the lungs, the tidal exchange again becomes shallow. The peripheral portions of the lungs are filled with the gases and may not be aerating. Rapid absorption of the gases thus predisposes to further atelectasis.

Carbon dioxide mixed with air, however, offers a real advantage without tending to produce alveolar collapse. The peripheral alveoli which may not be aerating will be filled with a slowly absorbed mixture when the tidal exchange has reverted to the previous depth following therapy. Air is not absorbed from an occluded portion of the lungs for as long as sixteen hours.⁵

When a patient's mucus is especially thick and tenacious, it is our practice to administer carbon dioxide by blowing it on the patient's face by a tube or funnel. The patient respires a mixture of carbon dioxide and air for a few minutes until the desired hyperventilation and cough are evoked. This treatment may be repeated every hour in conjunction with the other suggested measures. One must guard against too high a concentration of carbon dioxide, which will lead to cyanosis, convulsions and unconsciousness.

The administration of iodides orally will help liquify thick bronchial secretions but unless enteric coated tablets are employed, the patient usually experiences severe gastro-intestinal disturbances which preclude their continued administration.

If the above conservative measures are not effective after a reasonable trial, it is wise to consider bronchoscopy or tracheobronchial toilet. Unless the condition of the patient is rapidly deteriorating due to the atelectasis, it is not usually necessary to resort to bronchoscopy for at least twelve hours. The decision as to whether to continue conservative measures or to elect bronchoscopy depends entirely upon the condition of the patient. It is hazardous to temporize in the case which demands immediate bronchoscopy to save life.

6. BRONCHOSCOPY: The technic of bronchoscopy will not be described here. It is the most certain method of removing mucus from the bronchi, but requires the services of an expert bronchoscopist. The efficacy of this procedure depends for the most part upon the violent coughing produced by the presence of the instrument in the tracheobronchial tree. Mucus is forced into the larger bronchi where it may be seen and aspirated.

7. TRACHEOBRONCHIAL TOILET:^{6,7,8} This is a measure introduced by anesthesiologists for the cleansing of the tracheobronchial tree. It is suggested as an adjunct and sometimes as an alternate to bronchoscopy, but has the disadvantage that the operator cannot see the bronchus which is occluded. Its efficacy depends upon the propulsive coughing produced by a catheter inserted through an endotracheal tube into the trachea and major bronchi. Mucus is propelled into the major bronchi where it can be suctioned out. It has an advantage over blind tracheal catheterization in that the patient can breathe past the catheter through the endotracheal tube. The patient experiences less feeling of suffocation when this method is employed. Perhaps its greatest field of usefulness is in the unconscious patient in whom an endotracheal tube can be left in place for 24 or more hours, and mucus repeatedly aspirated. It has much to offer over repeated bronchoscopy when large amounts of mucus must be frequently removed from the tracheobronchial tree to prevent respiratory obstruction and hypoxia.

SUMMARY

The employment of conservative procedures in the immediate therapy of postoperative pulmonary atelectasis is described. It is emphasized that these measures will clear almost all cases without resort to bronchoscopy when the diagnosis is made early and vigorous treatment is instituted at once.

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Less Sodium and More Water—Continued from page 360

results in an increase of the extracellular fluid volume. Deleterious effects of this increase are mentioned.

It is implied that in general the body water requirements are to be met generously, whereas the quantity of sodium given should not exceed that of the actual requirement under circumstances where parenteral fluid therapy is indicated.

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Carcinoma of the Prostate Today—Continued from page 361

is not warranted and that a total prostatectomy should be done on any suspicious gland.

In summary I would state that the problem of carcinoma of the prostate is yearly becoming a more frequent and pressing one. Secondly, that to date we have used in the main only palliative procedures. Third, that if we are to make any appreciable progress in decreasing the mortality rate due to carcinoma

of the prostate we must take cognizance of the only cure available by doing early complete removal of the prostate or by doing complete prostatectomies on suitable apparently benign obstructive glands.

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CORRECTION

Due to a misunderstanding the Clinico-Pathological Exercise which was intended for this issue of the

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CLINICO-PATHOLOGICAL EXERCISE

Case presented at the Maine General Hospital, Portland, Maine

Edited by JOSEPH E. PORTER, M. D.

This patient was a 51-year-old white male, admitted to the hospital on November 27, 1946, with chief complaint of asthmatic attacks for 10 days. He had been apparently well until about 1942, when he first noted the onset of asthmatic attacks, appearing about twice a year and lasting over a period of a few days. Prior to this time he had never had any such attacks. Ten days prior to admission the patient noted the onset of another attack of asthma, and was treated from that time on at another hospital, with little relief. During that hospitalization he was given adrenalin, aminophyllin, and aerosol penicillin. Because of very little improvement he was transferred to the Maine General Hospital for further treatment.

Systemic review was not given. Family history not given. Past medical history: Patient had experienced biliary spells, accompanied by severe headaches, lasting one to two days, ever since childhood. Twelve years prior to admission he contracted a severe angioneurotic edema, and was treated by his local medical doctor, and apparently made an uneventful recovery. Eight years later it was learned that bacteria apparently played some role in producing his asthma. Three years prior to admission he was admitted to another hospital, with severe asthma and hives, and was given aminophyllin and three typhoid injections. He had intermittent asthma ever since that time. Ten months prior to admission he again had a severe attack of asthma, and was hospitalized at an osteopathic hospital, where apparently his condition "improved slightly." At about this time he had a tonsillectomy and adenoidectomy. He was taking Benadryl 7 months prior to admission; the hives he had at that time subsided, and he had not had them since then.

Physical examination on admission revealed a man of about staged age of 51 years, with acute attack of asthma. Examination of his chest revealed marked inspiratory and expiratory wheeziness, with considerable dyspnea. Temperature was normal; pulse 90; respirations 28; blood pressure 150/85. Admission blood count: Hb. 92%, 13.3 gms.; RBC. 4,560,000; WBC. 7,650; differential count: neutrophils 70%, eosinophils 3%, lymphocytes 23%; monocytes 4%. Platelets normal in smear. Mean corpuscular hemoglobin 29. Urinalysis on admission: Appearance cloudy; color yellow; reaction acid; specific gravity 1.016; no albumin, sugar, acetone, diacetic, or bile. Microscopic: No casts, crystals, or RBC.; rare WBC.; few epithelial cells; no bacteria.

Course in hospital: With intranasal oxygen therapy, ephedrin-nembutal capsules, and parenteral adrenalin, the patient remained fairly comfortable during the first days of his hospitalization. He was seen on the fourth hospital day by an allergy consultant of the hospital, and the following note made: "The patient is markedly orthopneic tonight, with severe respiratory discomfort. He is expectorating thick white mucus, somewhat frothy. He has been getting temporary relief with continuous nasal oxygen and adrenalin. Chest emphysematous; breath sounds distant throughout; scattered sibilant rales; heart regular, rapid rate. History of previous bronchitis, with exacerbations of bronchial asthma, for past 5 years, definitely improved in the summer months, strongly suggesting bacterial infection as etiology." On the fifth hospital day intravenous aminophyllin, 10 cc., and aminophyllin suppositories, 0.5 gm. t.i.d. were instituted on a daily regime. Though the patient remained fever-free until his 14th hospital day, penicillin 40,000 units every 3 hours was started on a q.3 hr. program on the 6th hospital day, but was discontinued after 3 days because of no apparent improvement.

On the 7th hospital day it was noted that the patient continued to raise thick tenacious sputum. He had sibilant rales scattered over his entire chest, and his cardiac rate was 100. Blood pressure was 112/70. Oxygen tent was substituted for the intranasal oxygen at this time, and the white blood cell count and differential at this time revealed the following: WBC. 11,350; differential count: neutrophils 89%, eosinophils 4%, basophils 1%, lymphocytes 5%; monocytes 1%. Erythrocyte sedimentation rate taken on the same day was 5 mm. fall per hour. There was little change in the patient on the 8th hospital day, when Essenamaine, dram 1, t.i.d. was started. A portable chest plate on the 8th hospital day was reported as negative. On the 9th hospital day the cardiac rate was still 100, and sibilant rales were still heard over the entire chest. Extra systoles were heard, and these were confirmed by EKG, which revealed in addition simple tachycardia and slight delay in intraventricular conduction. His respirations at this time were quite labored, and intermittent cyanosis was noted. He was taking nourishment fairly well, including liquids. Impression at that time was "questionable cardiac asthma." He was started on a digitalization program, purdigon 0.6 mg. on the 9th and 10th hospital days, and then

daily, 0.4 mg. and 0.2 mg. given alternately until the time of death.

On the 10th hospital day the patient was still expectorating thick white mucus, and his cardiac rate continued at 120; blood pressure was 150/85. "Luasmin" capsules were started, one q.i.d. Urinalysis on this day was entirely negative, showing no acetone or diacetic acid. On the 12th hospital day the patient was started on sulfadiazine, being given 5 gm. in 1000 cc. of normal saline. On the 13th hospital day this was continued in dosage of 1 gm. every 4 hours. Moist rales were heard for the first time at the right base, though the right base was resonant. Blood count was repeated on this day, and revealed: Hb. 88%, 12.7 gm.; RBC. 3,750,000; WBC. 12,550; platelets normal; MCH 33; neutrophils 80%, lymphocytes 14%, monocytes 6%. B.U.N. was 8 mg.-%.

The patient's respiratory distress became apparently worse, as on the 14th day coramine was started, one ampoule every 4 hours. On the 15th hospital day he was given 500 cc. of whole blood, and a bronchoscopy performed, in order to relieve what the bronchoscopist considered to be "status asthmaticus." On his examination he noted the following: "A very small amount of secretion was aspirated; 3 cc. of 1% ephedrine was left in. The asthmatic secretion was seen to be coming from the finer bronchi." Examination of the secretion obtained by bronchoscopy showed the following: 1 cc. bloody fluid; tubercle bacilli not seen; culture: *Staphylococcus Aureus* and pneumococci.

The patient failed to rally after the bronchoscopy, and on the next day aerosol penicillin was started 4 times daily, without any beneficial effect. On the next day the patient was started on 80% helium and 20% oxygen, with the positive pressure mask, and small enema of 2 oz. ether and 4 oz. olive oil was given. He failed to respond to all this vigorous therapy, and at 3.35 A. M. on the 18th hospital day he expired rather suddenly.

DISCUSSION

Dr. William Burrage: In summary, we have a 51-year-old man who has had apparent attacks of progressively severe and unremitting asthma of five years' duration. His allergic history, however, appeared to start in infancy, and I think his "biliary" spells might well be termed as a manifestation of migraine type headaches, some of which are due to an allergic basis. At 39 he had angioneurotic edema. At 48 it was learned that bacteria played some role in his asthma, i.e. the so-called intrinsic type of asthma. The next three years showed definite progression of his disease, in spite of treatment. I think

that even without a positive family history of allergy, the findings of various forms of other allergies, this patient had definite asthma.

We will go over the physical examination and take up the differential diagnosis. On examination of the chest the characteristic findings of asthma appear to be present. It is interesting to note that there is not much of a description of the heart. The size and presence or absence of murmurs would be difficult to evaluate, I assume, because of the presence of accompanying emphysema. It is not unusual to have a blood pressure of 150/85 during an acute asthmatic paroxysm, and I do not consider the blood pressure abnormal. The blood studies were not remarkable, except for a leukocytosis. The eosinophil count of 3-5% is quite normal, and not increased, as often occurs in an allergic individual. The urine was normal, and the acetonuria, I feel, was secondary to starvation ketosis during his terminal sickness.

I think the most important physical finding was the constant thick tenacious white sputum which he continued to have, in spite of the drugs used to prevent bronchospasm and liquefaction of sputum. Although it is reported that he took nourishment fairly well, including fluids, I wonder how well-hydrated he really was. Proper hydration in asthmatics is most important, since dehydration tends to increase the tenacity of the sputum.

We are told that at one time it was felt that his asthma might be on a cardiac basis, and this would have to be due to failure of the left ventricle. It is important to note that in spite of adequate doses of digitalis, the pulse could not be adequately controlled. This is not unusual with a weak myocardium and a regular pulse. There were rales heard at the right base, at one time, but these were present only after transfusions. It is disappointing that there is no mention of abdominal findings, the size of the liver, and the presence of ascites, sacral, or peripheral edema.

A normal blood urea nitrogen would appear to indicate intact kidney function and a specific gravity of 1.002 good hydration, if not part of a diuresis. Bronchoscopy was a very necessary procedure, since it helped to rule out other reasons for intrinsic narrowing of the lumen of the bronchial tree, such as tumors or infections which cause stricture, such as tuberculosis or fungus organisms. The portable X-ray of the chest was reported as negative.

Now I will try to establish a diagnosis. At the outset I consider that this man had intrinsic bronchial asthma. Other causes of asthmatic wheezing in the chest might result from compression of the trachea in the neck by an enlarged thyroid, enlarged thymus, or enlarged lymph glands, in the mediasti-

num by an aortic aneurysm, mediastinal tumor, enlarged hilar glands, as in Hodgkins disease, the presence of an intrinsic tumor, carcinoma or adenoma, aspirated foreign bodies, tuberculosis, silicosis, bronchiectasis, Loeffler's syndrome, periarteritis nodosa, and cardiac asthma. A negative X-ray of the chest, although portable, would appear to rule out substernal thyroid, mediastinal tumor, aortic aneurysm, Hodgkins disease, tuberculosis, silicosis, bronchogenic cancer, and Loeffler's syndrome. Bronchoscopic examination appears to rule out intrinsic tumor, foreign bodies, tuberculosis, and fungus infection, with the addition of aid of sputum culture from the aspiration.

The question then is raised: Is this cardiac asthma or an additional element of cardiac asthma? There is no description of heart size, shape, murmurs, and no mention of abnormal heart configuration is mentioned in the X-ray. The electrocardiogram fails to show either right or left axis deviation, the rate is rapid, and shows sinus rhythm, but some delay in the intraventricular conduction was noted, and extra systoles. This would suggest some degree of myocardial involvement, but not of much degree. Failure to lower the cardiac rate with digitalis is not unusual in the presence of a regular rhythm and the presence of marked respiratory difficulty and continued use of pressor drugs. The blood pressure did fall to 112, but returned to its previous 150. Did this represent an acute silent myocardial infarction? There is no mention of venous engorgement in the neck, enlargement of the liver, ascites, sacral or peripheral edema, and no past history of rheumatic infection, thyrotoxic, hypertensive, or coronary heart disease. The urine appeared to be blameless. It would be my feeling that there was little evidence for a cardiac basis alone for his asthma, but that there was some later element of cardiac asthma during his terminal week of illness.

Could this be periarteritis nodosa? We have evidence of progressive intractable asthma which started 5 years after an attack of erysipelas. This streptococcal infection might have served as the sensitizing infection, as is frequently found in such cases. We have later signs of myocardial insufficiency, but there is no evidence of renal disease, which should be present. The normal eosinophil percentage of 3-5% is strongly against the diagnosis, since most cases show 15% or more, even to 30-40% at times. Its onset is a little late in life, because most cases start in the third or early in the fourth decade. Thus I feel we can discard periarteritis nodosa, although it is an inviting secondary diagnosis.

By exclusion, I wish to return to the diagnosis of intrinsic bronchial asthma as the patient's primary disease. What was the cause of death here? An intractable asthmatic attack alone can cause death to

about 7.6% of intrinsic bronchial asthma cases. The cause is asphyxiation by the thick tenacious sputum, which completely occludes the terminal bronchioles. This would seem to be most likely here, as confirmed by the findings of the bronchoscopist. The degree of hydration is most important in status asthmaticus, because of the increased tenacity of the sputum in poor hydration, and the enormously increased loss of moisture from hyperpnea, and sweating from exertion. There was no mention of parenteral hydration or the use of potassium iodide in the history.

What else could have caused death on the 18th day of status asthmaticus? Was it a spontaneous pneumothorax with a tension pneumothorax in addition? Dr. Philip Thompson and I saw such a case in Boston several years ago. Was it massive atelectasis of the lung or of a lobe from the thick bronchial secretions? This seems ruled out by the bronchoscopic examination and aspiration. Was it due to congestive heart failure secondary to pulmonary hypertension from pulmonary emphysema and right heart strain? This exodus appears to have been too sudden to have been caused by this condition, although pulmonary emphysema may have contributed to some of the suspected congestive heart failure. Pulmonary infarction, single or multiple, could have caused this sudden death, the source of the embolus being the leg veins, which might be subject to phlebothrombosis, secondary to prolonged bed rest. Was his demise due to idiosyncrasy to any of the drugs given, i.e. the procaine anesthesia of bronchoscopy, the ephedrine compounds, or adrenalin, leading to a ventricular fibrillation in an irritable failing heart muscle, or to the barbiturates? Even penicillin might sensitize the patient. There is no mention made of morphine, and I hope that it was not given here, because patients in status asthmaticus do not tolerate morphine. In older days, morphine given to patients in status asthmaticus usually brought rather sudden death shortly after their administration.

Dr. Burrage's Diagnosis:

1. Intrinsic bronchial asthma and status asthmaticus.
2. Periarteritis nodosa.

Dr. James Parker: What would be the reason for giving blood in the last 48 hours?

Dr. Burrage: I don't know. He was not anemic and not in shock.

Dr. Ralph Heifetz: How much damage would be done by giving blood rapidly?

Dr. Burrage: If blood is given slowly, then it is all right. Rapid transfusions and fluids increase the blood volume to the right side of the heart, and through the reflex result in a tachycardia, which in a poor myocardium results in failure and pulmonary edema.

Dr. Isaac Webber: Has there been any sort of attack on the nervous system in this condition?

Dr. George Maltby: Sympathectomy hasn't done much either way.

Dr. Philip Thompson, Jr.: Does Dr. Spencer have anything to add on the films?

Dr. Jack Spencer: Both lungs are well-aerated, the trachea is in midline, and there is no consolidation.

Dr. John Lincoln: The helium-oxygen therapy was started within 24 hours of his death. I wonder, on a theoretical basis, whether this should be used in patients with a restricted aeration. Patients who should respond to this low-tension mixture, actually do not tolerate it. Especially since this patient had previously been on 80% nasal oxygen, might not 20% oxygen-helium mixture have hastened his demise and he might well have been put back on 80% nasal oxygen?

Dr. Maltby: Does anybody feel that morphine contributes to death?

Dr. Heifetz: We gave morphine for seven or eight years to an asthmatic, the only thing she could take. She was hospitalized several times here and bronchoscoped. When given small doses of morphine, she could then tolerate small doses of adrenalin.

Dr. Maltby: It quiets anxiety more than anything else.

Dr. Porter: We've had two cases here where I felt morphine contributed to death. One ambulatory patient died very shortly after being given morphine.

Dr. Burrage: The patient might have had an idiosyncrasy to the drug itself.

Dr. Porter: I think many people have.

Dr. Burrage: May this not have been an anaphylactic reaction and collapse?

Dr. Ralf Martin: I am told that asthma used to be one of the first causes of addiction to morphine. It helped some of them.

Dr. Lincoln: In between attacks morphine does

not have the same effect as it does during status asthmaticus. With other drugs you can tide these patients through the acute attack.

Dr. Porter: Are you ready for the pathological report?

Dr. Spencer: I haven't the slightest idea of the diagnosis—it sounds too simple to be true.

Anatomical Diagnosis:

1. Pulmonary embolism.
2. Bronchial asthma.
3. Pulmonary emphysema.

Dr. Porter: The immediate cause of death in this case was pulmonary embolism. This man had a large embolus in each pulmonary artery, and apparently some older ones in several smaller radicals. One clot was definitely adherent to the wall of the pulmonary artery. It was not a local thrombosis in the pulmonary artery, since the one on the left was curled on itself, as though it had travelled from some other area. The left iliac veins were thrombosed. We have no sections to determine if this was phlebotrombosis or thrombophlebitis. Both lungs were emphysematous and showed much mucus in the bronchi and bronchioles.

Dr. Elton Blaisdell: In spite of everything we gave him, he grew worse. It was my impression that he had some form of heart disease with his chronic asthma which he had had for several years, perhaps a moderate dilatation of the heart and hypertrophy from sclerosis of coronary arteries. He was just full of rales, and was getting worse all the time. We digitalized him and got nowhere. This is one of the cases you see, along in middle life, with asthma, where you feel that probably he hasn't got bronchial, but cardiac asthma. This man had bronchial asthma, had been in bed for some time, and with poor peripheral circulation, developed pelvic thrombi, as many do when in bed for a long time, and it was evident at death that he had pulmonary emboli. He was not a coöperative patient. Anything we did was quite wrong, but evidently we didn't do him any good.

Constructive, purposeful activity is far better psychotherapy than a playful waste of leisure time. Ed., *Am. Rev. Tbc.*, Aug., 1947.

Mass radiography of all institutions for the men-

tally ill should be repeated every two years. It is noteworthy that reinvestigation has been productive of a significant number of cases who were negative on previous examinations.—A. H. Russakoff, M. D., *Am. Rev. Tuberc.*, Jan., 1947.

THE PRESIDENT'S PAGE

I am very glad to accede to President Ames' request that I take over his page for this month. It's almost like turning the clock back to 1936-37.

Inasmuch as my present activities in the Association are confined to the Committee on Public Relations, it would seem appropriate to devote this page to this important subject.

We must admit that our Profession has paid little attention to the matter of Public Relations, and in consequence has failed of public support and approval for many of its most altruistic aims and objectives. Now that a belated effort is being made to improve our program, it would seem advisable to consider just what constitutes a good Public Relations program.

It is a fallacy to think of Public Relations solely as Propaganda and Publicity. Important as are news releases and radio programs in educating the Public as to the mission and accomplishments of medicine, these are not nearly so vital as are our everyday relationship with our patients. After all, these constitute the most receptive portion of the Public.

Each member of our Association can do much to build a good Public Relations program by giving more thoughtful consideration to the matter of financial relations with his patients. Illness should not entail economic catastrophe. Loss of earning power through sickness may be all the patient can bear and survive economically. Too often the physician may fail to recognize this and his fee may become the proverbial "straw which breaks the camel's back." This does not deny the right of the physician for adequate payment for his services, but it does imply that fees should be always commensurate with the financial status of the individual patient. He should not be forced to deplete his Life's Savings to pay for unavoidable illness or mortgage his future to gain title to an addition to his family.

After all, we must not set a price-tag on either Life or Health, or on our services as physicians. Thoughtlessly, high fees or standardized charges for medical services, regardless of the patients' resources, are the greatest causes of dissatisfaction with the present system and furnish much of the agitation for Government-controlled Medicine, under the guise of a compulsory health insurance program.

Hospital insurance has proven a boon to many, and our new voluntary medical care plan promises a great deal. Both merit our support. We can be better physicians by showing something of the same consideration to the patient's economic plight as we do to his physical condition.

Good Personal Relations makes for Good Public Relations.

FREDERICK T. HILL, M. D.

EDITORIAL

United We Stand

In June, 1948, at Atlantic City, the members of the American Medical Association celebrated the 100th Birthday of the Association. Eminent men who were well qualified to speak on the occasion recounted the progress and accomplishments of the medical profession. The addresses of these men of good will were heard and well received by many thousands of people. Press accounts and editorial comments, were favorable to the theme that the American physician had developed and delivered to the people the best medical care in the world. It seemed as though the majority of the people in this country appreciated and approved of the American plan of the practice of medicine. In the House of Delegates during this Centennial meeting many delegates from Foreign Medical Societies were introduced. They brought Birthday Greetings and gifts from their far away countries. And every foreign delegate who spoke at this meeting expressed sincere thanks to the physicians of America, not only for their generous material help in many instances, but also for their peerless leadership in creating a finer and better medical service to the people of the world. And they, moreover, emphasized the fact that a medical profession free from government control maintained the highest standards of practice and produced the most beneficial advances in the science of medicine. Their whole-hearted admiration for our free system of medicine was indeed touching. It seemed as though all the medical societies in the world, except for a special group which were not represented, appreciated and also approved of our American system of practice.

Following the meeting the profession knew that the record was good and that the past was secure, and according to all signs the future looked as bright as the past. But events of Autumn have changed this picture. And at St. Louis, during the Interim Session, new signs appeared indicating that the pres-

ent system was under fire and would be blown to pieces by the big guns in the new administration. The Delegates at the Interim Session were informed by the Chairman of the Board of Trustees that in all probability an increase in dues would be necessary. The Delegates approved the Chairman's report and proceeded to consider ways and means for raising funds. Various resolutions were introduced to support the Chairman's statement. A resolution introduced by the California Delegation containing an unequivocal affirmation of confidence in the Board of Trustees was introduced and unanimously approved. It stated that the American Medical profession as represented in the House of Delegates of the A. M. A. were unalterably opposed to all forms of government control of the practice of medicine, that they were united in support of the policies of the Association, that they recommended enlargement and expansion of the Washington office of the Association, that they recommended employment of the best public relations men available, and that they had faith that the American people would reject government plans for compulsory medical insurance when they had all the facts accurately and honestly presented to them.

In order to provide funds to carry out a program for the enlightenment of the people, it was voted unanimously to empower the Trustees to levy an assessment of \$25.00 on every member of the Association. The Trustees have the authority to collect this money and to expend it appropriately.

Therefore, the Association starts out in the first step of its Second Hundred Years pledged to carry to the people, with a united front, full accounts and honest information about the American system of the practice of medicine, and to defend to the bitter end, if need be, the present form of non-governmental system of medical practice.

THOMAS A. FOSTER, M. D.

Please Send Your Participation Agreements

A considerable number of acceptances for the Medical Care Plan have been received. Those physicians who wish to participate in the Plan but have neglected to reply are urged to forward their signed acceptance forms without delay, since the Committee intends to send invitations to insurance companies at once. Results of the national election leave no doubt that compulsory insurance will again come

before the Congress and this time with a much greater chance of enactment. Our best defense is the enrollment of a large section of the population in voluntary plans. The medical profession must get behind these plans if they are to succeed.

EUGENE H. DRAKE, *Chairman,*
Health Insurance Committee.

COUNTY SOCIETIES

Androscoggin

President, Paul R. Chevalier, M. D., Lewiston
Secretary, Glidden L. Brooks, M. D., Lewiston

Aroostook

President, Rosario A. Page, M. D., Caribou
Secretary, Clyde I. Swett, M. D., Island Falls

Cumberland

President, Harold J. Everett, M. D., Portland
Secretary, Joseph E. Porter, M. D., Portland

Franklin

President, Maynard B. Colley, M. D., Wilton
Secretary, Kenneth A. LaTourette, M. D., Farmington

Hancock

President, M. A. Torrey, M. D., Ellsworth
Secretary, Robert H. Delafield, M. D., Ellsworth

Kennebec

President, William L. Gousse, M. D., Fairfield
Secretary, Arch H. Morrell, M. D., Augusta

Knox

President, Wesley N. Wasgatt, M. D., Rockland
Secretary, Freeman F. Brown, Jr., M. D., Rockland

Lincoln-Sagadahoc

President, Virginia C. Hamilton, M. D., Bath
Secretary, Neil L. Parsons, M. D., Damariscotta

Oxford

President, Roland L. McCormack, M. D., Norway
Secretary, Dexter E. Elmore, M. D., Dixfield

Penobscot

President, Martin C. Madden, M. D., Old Town
Secretary, Herbert C. Scribner, M. D., Bangor

Piscataquis

President, John B. Curtis, M. D., Milo
Secretary, Norman H. Nickerson, M. D., Greenville

Somerset

President, Maurice E. Lord, M. D., Skowhegan
Secretary, Edwin M. Lord, M. D., Skowhegan

Waldo

President, John A. Caswell, M. D., Belfast
Secretary, Raymond L. Torrey, M. D., Searsport

Washington

President, Willard H. Bunker, M. D., Calais
Secretary, Karl V. Larson, M. D., East Machias

York

President, Paul S. Hill, Jr., M. D., Saco
Secretary, C. W. Kinghorn, M. D., Kittery

COUNTY SOCIETY NOTES

Cumberland

A regular meeting of the Cumberland County Medical Society was called to order by the President, Dr. Harold Everett, at 8.00 P. M., October 8, 1948, at the Eastland Hotel, Portland. The meeting was preceded by a dinner.

During the business meeting Drs. Paul Maier and W. Henry Harper were unanimously elected to membership. The resignation of Dr. Thomas Burrage was read. It was suggested that he be made an honorary member of the society. However, it was the vote of the society that before this is done, Dr. Everett discuss with those members who have resigned during the past year, the significance of appointment to honorary membership in the society, and the fact that it does not carry any official status in the Maine Medical Association.

A nominating committee, consisting of the following members, was appointed by the chair to draw up a slate of officers for 1949; Dr. Joseph Porter, Chairman, Drs. Clifford Logan, DeForrest Weeks, Thomas Martin and Richard Hawkes.

Dr. Everett then explained briefly the Woman's Auxiliary of the Maine Medical Association.

It was voted by the society that approval be given the principles and purposes of the American Diabetic Association, which was explained by Dr. Elton Blaisdell. The secretary was then instructed to write to Dr. Howard Root, expressing the sentiments of the society towards this interesting work.

Dr. Thomas Martin suggested that a medical calendar for the county be approved by the society. Following a discussion it was voted that the medical calendar of events in the Cumberland County area be submitted to the Editor of THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION, and that it be published in each issue.

The scientific papers of the evening were given by Dr. Montgomery Deaver, and Dr. Edwin L. Bortz, past president of the American Medical Association. Dr. Deaver spoke on "Cancer of the Large Bowel." Dr. Bortz discussed the increasing importance of geriatrics in medicine, and also spoke on medical education. Both papers were enthusiastically received.

JOSEPH E. PORTER, M. D.,
Secretary.

Kennebec

A regular meeting of the Kennebec County Medical Association was held at the Veterans Administration, Togus, Maine, November 18, 1948.

Dr. Bernard Allen, medical director at Togus, presided at the clinical session at 5.00 P. M. Dr. Dunham Kirkham spoke on "Tumors of the Thymus Gland," Dr. John Laughlin on "Aplastic Anemia," Dr. Samuel Spodia, orthopedic surgeon at Togus, on "Spondylolisthesis, its Diagnosis and Treatment by Spinal Fusion," and Dr. John Nelson on "Gastric Resections for Ulcer and Cancer of the Stomach and Duodenum." Several cases were exhibited.

A delicious steak dinner was served at 6.00 P. M.

Dr. William L. Gousse presided at the business meeting which was called to order at 7.00 P. M. The minutes of the last meeting were read and accepted. Dr. Loring W. Pratt was elected to membership. A nominating committee, consisting of the following members, was appointed by the Chair to draw up a slate of officers for 1949; Drs. George Campbell, Edward Risley and Frank Bull. Dr. Frederick R. Carter, of Portland, gave a short talk as Secretary of the Maine Medical Association.

Dr. Claude Welch of the Massachusetts General Hospital, Boston, guest speaker of the evening, was introduced by



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1. Orgain, E. S.: The Treatment of Congestive Heart Failure, North Carolina M. J. 8:125 (March) 1947.

*Searle Aminophyllin contains at least 80% of anhydrous theophylline.

Dr. Allen. Dr. Welch's subject was "Thrombo-embolism." He first gave an illustrated talk on the causes of embolism and the treatment with dicumeral as a prophylactic and curative measure. He then discussed ligation of the femoral veins in certain cases. There was a very interesting and profitable discussion following his lecture.

H. E. SMALL, M. D.,
Secretary pro-tem.

Penobscot

The annual meeting of the Penobscot County Medical Association was held at the Bangor House, Bangor, October 16, 1948.

The following officers were elected for the coming year:

President, Henry C. Knowlton, M. D., Bangor.

Vice President, George I. Higgins, M. D., Newport.

Secretary-Treasurer, Herbert C. Scribner, M. D., Bangor.

Board of Censors for three years, A. K. Hill, M. D., Bangor.

Delegates to the Maine Medical Association: William A. Purinton, M. D., Bangor, and John J. Pearson, M. D., Milford.

Dr. Langdon Parsons of Boston, guest speaker of the evening, gave a very interesting talk on "Endometriosis."

There were fifty-five present.

HERBERT C. SCRIBNER, M. D.,
Secretary.

York

A meeting of the York County Medical Society was held at the Cascade Lodge, Scarborough, on Wednesday, October 13, 1948, at 12.30 P. M.

The members of the Society were guests of the Saco-Lowell Shops of Biddeford, Maine, who presented a very interesting program relating to Industrial Medicine and its problems. The program for the meeting was arranged by Frank W. Barden, M. D., physician for the Shops.

At a brief business meeting it was voted to have the annual meeting in January, 1949, at Sanford, with the following committee in charge—Drs. S. A. Cobb, H. D. Ross, C. E. Richards and E. W. Holland. These same doctors were appointed as a nominating committee to bring in nominations for officers for 1949.

The meeting was then turned over to Dr. Barden, who introduced the following speakers: Mr. J. S. Chafee, Mr. George Potter, Forrest Richardson, Esq., Robert B. O'Connor, M. D., and Mr. Roger Sherman.

They gave very interesting and instructive talks on Industrial Medicine, Medical Compensation and Industrial Management.

A moving picture on Industrial Medicine was shown which was exceedingly interesting and instructive.

C. W. KINGHORN, M. D.,
Secretary.

New Members

Cumberland

(Admitted October 8, 1948)

W. Henry Harper, M. D., 203 State St., Portland.

Paul Maier, M. D., 723 Congress St., Portland.

Kennebec

(Admitted November 18, 1948)

Loring W. Pratt, M. D., Waterville.

NOTICES

Accepted Fellows American College of Surgeons

The following members of the Maine Medical Association have been accepted as Fellows of the American College of Surgeons:

Joseph H. Giesen, M. D., Waterville

Howard R. Ives, M. D., Portland

Donald F. Marshall, M. D., Portland

Francis A. Winchenbach, M. D., Bath

Dr. Stephen S. Brown Resigns as Maine General Director

Dr. Stephen S. Brown, 57, has submitted his resignation as administrative director of the Maine General Hospital, Portland, effective December 31, because of poor health.

Dr. Brown, who in point of service, is the oldest hospital administrator in Maine, assumed the post in June, 1930. He became associated with the hospital in 1929 when he accepted an internship appointment, and served as resident physician and acting director for several months before assuming the administrative post.

He plans to become active again when he regains his health after an extended rest.

American College of Surgeons Announces 1949 Sectional Meeting Schedule

The American College of Surgeons announces that six 2-day Sectional Meetings will be held between January 7 and April 13, 1949, for physicians and surgeons, and professional personnel of hospitals. A seventh meeting to be held in the West the latter part of April will be announced later. The latest developments in medical science and in hospital service will be presented at each meeting.

Conferences for the hospital personnel and for the medical groups will run concurrently. A joint meeting of the two groups will open at 8.30 a. m. each day with the showing of medical motion pictures, followed by separate sessions at 10.00 a. m. Luncheons for the physicians and surgeons and for the hospital representatives respectively, will be held daily. Separate afternoon sessions beginning at 2.00 o'clock will be held for the two groups. There will be a dinner meeting followed by a round table conference on the first evening.

For further information write to: L. G. Jackson, Director, Department of Public Relations, American College of Surgeons, 40 E. Erie Street, Chicago 11, Illinois.

Continued on page 380

Proceedings

NINETY - FOURTH ANNUAL SESSION

Maine Medical Association

House of Delegates

POLAND SPRING, MAINE

June 20, 21, 22, 1948

(Continued from the November issue, page 338)

CHAIRMAN AMES: We have come, now, in our agenda, to the election of a Councilor for the First and the Second Districts of our Association. The term of office of Carl E. Richards of Alfred, expires at this time. Nominations are in order for a successor for Carl E. Richards, as Councilor for three years from the First District.

DR. FRANK A. SMITH of Westbrook: Mr. President, the delegates from York and Cumberland Counties are unanimous in recommending Dr. Eugene H. Drake for Councilor from the First District.

CHAIRMAN AMES: Are there any other nominations?

A MEMBER: I move that nominations cease, and that the Secretary cast one ballot for the election of Dr. Drake as a member of the Council from the First District.

This motion was duly seconded and was unanimously carried.

CHAIRMAN AMES: The Secretary has cast the ballot, and I now declare Dr. Drake elected Councilor of the First District. [Applause.]

The office of Councilor from the Second District is now open for nominations. Ralph Goodwin has finished his term.

DR. DELBERT M. STEWART of South Paris: Understanding that it is now the turn of Oxford County (we have an agreement with Androscoggin and Franklin), I have talked with several members of the Oxford County Society and we are unanimous in presenting the name of Dr. James A. MacDougall of Rumford.

DR. GEORGE L. PRATT of Farmington: I will second the nomination and I move that nominations cease.

CHAIRMAN AMES: I will ask for a showing of hands, relative to the election of Dr. MacDougall.

Upon the showing of hands, Dr. MacDougall was declared unanimously elected to the office of Councilor of the Second District.

CHAIRMAN AMES: I want to take a moment to compliment the men retiring on the type of work they have given to the Council. I think if you will look at the record, you will find that they have attended all of the Council meetings; they have taken part in the meetings, and their advice has been very helpful to the Council Group as a whole. I congratulate the new men who are of extremely high calibre! [Applause.]

The next item of business is the election of the Delegate to the American Medical Association.

DR. CARL E. RICHARDS of Alfred: Mr. President, I have talked to our present delegate to the American Medical Association, Thomas A. Foster, and he is willing, if we are willing, to return to the job for two more years as the Constitution calls for it. In the last issue of the magazine *Medical Economics*, and perhaps most of you have read it, it says that theoretically, a delegate could expect to be appointed to some Reference Committee every second or third session, but the following men have been named on Reference Committees at least three sessions out of the last four, and they list ten men, including Thomas A. Foster of Maine. Then it goes on to say that those men have had more to do with

shaping recent A. M. A. policies than most other members of the House.

I just bring that up to show that the delegate we now have out there is apparently representing us in a proper way, and I nominate Dr. Thomas A. Foster of Portland, for another two-year term.

This motion was duly seconded and was carried, unanimously.

CHAIRMAN AMES: According to my agenda, we now come to the consideration of the items referred to the Reference Committee, and on which you have heard their report.

The first matter to be considered, which was brought to you by the Reference Committee, was a motion that this Committee be appointed to study a revision of the Constitution and By-Laws of our Association, to recommend revisions and bring them up-to-date.

This was reported favorably by the Reference Committee and it is now referred to the House of Delegates.

DR. CLYDE I. SWETT of Island Falls: Mr. Chairman, I move that we appoint such a Committee to review the By-Laws.

This motion was duly seconded and was unanimously carried.

CHAIRMAN AMES: The second article which was referred to the Reference Committee had to do with the formation of a Women's Auxiliary. The original motion was that if the women desired to form such an auxiliary, that this group would approve the idea and cooperate with them. Those are not the exact words, but that is the intent, and it is in the official records, with the approval of the Reference Committee.

May I have a motion relative to that?

DR. SMITH: I so move, Mr. Chairman.

DR. SWETT: I would suggest, in order to give it a head, that we amend the motion to read that the proposition be placed before the ladies by the First Lady, the wife of the President of the Association, in order that the matter may be brought to some termination.

This motion was duly seconded by Secretary Carter and was carried.

CHAIRMAN AMES: Now, do you wish to vote in favor of amending the original motion?

The amended motion is that we approve the Ladies' Auxiliary, and that the wife of the incoming President be Chairman pro tem to arrange with the ladies who are interested in the formation of such an auxiliary.

All those who are in favor of such a motion will please say "aye." Those opposed?

There was a chorus of "ayes" and the motion was unanimously carried.

CHAIRMAN AMES: The third item has to do with the nursing situation, which was described so vividly by Dr. Swett yesterday. I shall not attempt to repeat the wording of the motion. It was submitted in writing, and the gist of it was that we approve the program to be proposed and that

it be set up for training nursing attendants in the State, and that proper committees and officers be appointed to carry out the meaning of this particular plan.

Is there any discussion on that particular question?

A MEMBER: I move that we adopt the proposition as presented by Dr. Swett and endorsed by the Reference Committee.

This motion was duly seconded and was carried.

CHAIRMAN AMES: We now come to the fourth proposition, relative to prepaid medical care plans, which subject has been reviewed for you by the Chairman of the Reference Committee, and the unanimous recommendation by that Committee is that this group adopt that plan.

What are your wishes relative to this matter?

DR. SWETT: Mr. President, I move that we adopt the plan, as proposed by the Prepayment Insurance Committee.

DR. CARL E. RICHARDS of Alfred: I will second that motion.

DR. SMITH: As you know, I have been on this Committee for two years, and very strong for the plan. Now, not letting anybody down, I just want it to be understood that I, personally, do not want to see any plan put into effect that hasn't the very great majority of the support of the medical men in Maine. So that I should like to hear some discussion on that. . . .

I think that this affects each and every one of us, whether obstetricians, or surgeons or what-not. And, the Cumberland County Delegation is authorized by our County Society to vote for this. But, I have great respect for other men's opinions, and I think that we want to be sure, and, as far as possible, to know that the plan will get the backing of the great proportion of the medical men in the State.

CHAIRMAN AMES: Thank you, Doctor. Is there any further discussion?

DR. JAMES A. CROWE of Ellsworth: I should like to ask Dr. Smith how he proposes to know whether they had the backing of the vast majority of the doctors in the State?

DR. SMITH: The discussion, perhaps, will bring that out.

DR. P. L. B. EBBETT of Houlton: Mr. President, I think that there are delegates here who have talked this matter over with their county societies, and I think if we had the opinion of those societies, it might be the answer to Dr. Crowe's question.

This plan was adopted unanimously, with the exception of one man, by the Aroostook County Medical Society.

DR. EDWARD L. HERLIHY of Bangor: Why not call on the delegates from each County Society, and find out if they were instructed by their societies? In my district, Penobscot and Piscataquis, all delegates were to get the opinion of the majority of the doctors.

CHAIRMAN AMES: Does that meet with the approval of the House of Delegates?

DR. SMITH: I move that we poll the delegates.

This motion was duly seconded and was carried.

[At this point, the roll was called.]

ANDROSCOGGIN MEMBER: I was instructed to support the proposition, even if we had to have commitments.

CUMBERLAND COUNTY MEMBER: Yes.

DR. PRATT of Franklin County: My County gave no instructions; I think the feeling was that they would prefer to go on as they are.

DR. CROWE of Hancock County: I was instructed to vote against it.

KENNEBEC COUNTY MEMBER: Our County Society voted by a majority to vote for the adoption of the plan.

KNOX COUNTY MEMBER: We are in favor of the plan.

LINCOLN-SAGadahoc MEMBER: We gave the matter con-

siderable consideration; we had a speaker come down and talk to us. We realize, without offering anything that is not already available to everybody, that the hue and cry for insurance has been instigated by the socialization program, and we are instructed by our societies to go along with the insurance committee's recommendation.

OXFORD COUNTY MEMBER: We voted to recommend trying the proposition for one year.

PENOBSCOT COUNTY MEMBER: We report "Yes."

PISCATAQUIS COUNTY MEMBER: Yes.

SOMERSET COUNTY: No delegate responded.

WALDO COUNTY MEMBER, DR. SMALL: At a special meeting of our Society, with only one absentee, and that member never attends anyway, it was unanimously voted to instruct me to support the plan.

WASHINGTON COUNTY: No delegate responded.

DR. RICHARDS of York County: We already have the plan in most of the big industries. We voted unanimously to adopt the plan.

CHAIRMAN AMES: The vote, as taken on roll call, by counties, is as follows: Yes, 11 votes; No, 1 vote; and 2 not voting. Does that clarify the situation?

So far as the record goes, that is the vote.

Is there any further discussion?

QUESTION: I want to ask what would be the status of any individual who did not see fit to bind himself to the contract. Could he be paid from insured patients the sum of the schedule towards any fee he might charge, or would he be barred entirely from participation, if a patient were under the insurance plan?

CHAIRMAN AMES: I am going to ask Dr. Drake to answer that question.

DR. DRAKE: As I understood the question, I can see no reason why any man of the State Society who did not choose to participate could not receive money from the insurance company for payment. The only thing he would not agree to do would be to limit his fee in the low income groups to the fee schedule.

CHAIRMAN AMES: Are there any other questions, or is there any further discussion? Are you ready for the question?

QUESTION: Is there any objection to a private vote by mail to these questions? Most of the county meetings are attended by a small number of the membership. So that wouldn't include all the practitioners in the outlying districts who never attend.

A MEMBER: I don't believe that the men who never attend a meeting deserve consideration.

DR. EBBETT: If I may say so, our representation was good at our meeting. We discussed the matter at two meetings, and at the first meeting, it was not very favorable; but, when the matter was taken up, there were certain things that the men wanted revised. However, they decided very strongly in favor of it, as I said before.

I may say, also, that probably if the members knew this matter was coming up, and undoubtedly they did know it was going to be taken up, then if they weren't there to discuss the problem, it is their mistake; they should have been there. At least, they knew, in our society, that the matter was going to be discussed, and probably in the other county societies, it was the same way.

CHAIRMAN AMES: Are you ready for the question. It has been moved and seconded that we adopt the report of the Reference Committee and approve the prepaid medical care plan, as proposed by this Committee, on the basis of one year, for which it is set up, the details of which are carefully printed in the report you have received.

All those who are in favor of the motion will please signify by raising your right hand? Those opposed?

On a hand vote, there was only one hand raised in opposition, and the motion was carried.

CHAIRMAN AMES: I will declare the motion passed.

We have one or two final items of business which I want to bring to your attention and which I think you can pass without too much time elapsing.

We have had recommended two or three times during the session that we have a Legislative Committee to supplement and ultimately replace the present small committee, which is now on our books of standing committees. In order to cover that for the ensuing year, I believe it would be necessary for this House of Delegates to vote the creation of a special Legislative Committee, until such time as our Constitution and By-Laws are amended.

PRESIDENT COBB: May we have a meeting tomorrow, because we have got to pass an amendment to a by-law? I have an amendment here:

BE IT RESOLVED: That Section 3 of Chapter VII of the By-Laws be stricken out, and the following be substituted therefor:

"The Committee on Legislation shall consist of five members, to be appointed by the President."

CHAIRMAN AMES: That is the motion, that is before the House, which would need to be laid over for twenty-four hours, and this House, of course, has the privilege, and the Council can, by a two-thirds vote, call a special meeting of the House of Delegates, and the House of Delegates themselves can authorize a special meeting by a majority vote. If we pass this vote, we can have a meeting tomorrow and vote on the authorization for this committee. That would be my ruling at the moment.

Now, there was a request that we put in at this time a Constitutional amendment relative to the age of our retirement.

DR. RICHARDS: In York County, since the dues went to \$35.00, we have a few men who are 70 and 75 and 80-years old, who have belonged to the County Society and who have been active in the meetings, but they are not in practice at the moment, and \$35.00 looks like a lot of money, and they want to drop out. Some of them we are carrying by some of the members paying their dues; but, after talking it over, we in York County decided that we should investigate the matter of creating a senior membership for members 70-years old or older, to which these men could belong, and have the rights and the privileges of the Association; that is, not only in their county but the State and the National, without paying dues. We felt that the presence of these men at our meetings was worthwhile, and we wanted to keep them coming.

We asked the Executive Secretary to investigate the legality of this situation, and he has written letters to two different departments in the American Medical Association. Here is the answer to one letter:

"I have discussed the contents of your letter with the office of Dr. Hull and have been advised that the proposed senior members will not lose membership in the A. M. A. as long as they are members of the Maine Medical Association, despite the fact that they will be relieved of the payment of dues.

"In other words, whether or not a member of a State medical association pays dues is not material, insofar as the retaining of membership in the national association is concerned. The senior members may retain their fellowship, if they continue to pay fellowship dues which, as you know, entitles them to receive the JOURNAL. If they decide to discontinue the payment of fellowship dues, they still may be accepted affiliate fellows of the Association, on recommendation by the State association, and favorable action on the recommendation by the House of Delegates."

Therefore, BE IT RESOLVED BY the House of Delegates of the Maine Medical Association, in convention assembled, as follows:

To amend Article IV of the Constitution of the Maine



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Medical Association by adding at the end thereof the following:

"And, when recommended by his County society, any member in good standing who has attained the age of seventy may, by vote of the House of Delegates, become a Senior Member of the Association, without further payment of dues, and without loss of any of the rights and privileges as members."

CHAIRMAN AMES: You have heard this recommendation. This will be automatically taken care of by our present By-Laws, which states that the House of Delegates may amend, by a two-thirds vote, provided such amendment shall have been presented in open meeting, etc.

In other words, this proposed amendment to our Constitution, having been read at this meeting, can be legally put into effect one year from now by this House of Delegates.

DR. SMITH: Mr. President, Cumberland County took up something of that same nature, only in a little different way, and we should like to have a ruling on it. We have said that the members would have to be of 25-years' standing. We have about six of them who are not in active practice, members who have been retired from the armed forces, but they are not 70-years of age; yet, they have been in practice for twenty-five years or more, and they do not feel like paying dues, but they do like the association of the medical profession and do not care whether they are allowed to vote or not.

I was wondering, under that condition, is it up to a county society about the payment of dues and the voting?

CHAIRMAN AMES: Some of our own county societies have handled that individually, and have taken care of that, themselves.

DR. SMITH: So that it doesn't require any action here. They are not voting members?

CHAIRMAN AMES: That is right. Are there any other questions relative to that?

Then, as I see it, this matter would automatically go on the table, and will be effective a year from now.

Any recommendations brought up by the new Constitution Committee will have to lay over. Anything to do with the By-Laws may be brought in on the first day and can be voted upon the second day and become effective at once.

Is there any further business to come before the meeting?

DR. FERGUSON: I have one other matter that I wish to bring up. Dr. Brown reported to us on the plight of the hospitals; they are getting no better with reference to the increased charges to the patients.

Now, we have resolved to support any measures of the Hospital Association to obtain additional aid from the State, and the small amount of aid resulted in an increasing of the deficit. Therefore, I present this to you:

BE IT RESOLVED: That the Maine Medical Association express to the Maine Hospital Association and appropriate agencies of the State of Maine its complete support of any measures designed to promote more adequate payment to the hospitals, toward the hospital care of the medically indigent.

I move that we adopt this resolution.

This motion was duly seconded and was carried.

CHAIRMAN AMES: Is there any other business to come before the meeting?

DR. RICHARDS: Mr. President, Dr. Porter and Dr. Ferguson are interested in some sort of an association of blood banks for the State. I don't know just what they want from us, but I imagine that they would like to have the doctors of the State approve some sort of association throughout the State in all hospitals which they would like to form. Maybe they could tell us a little more about it.

DR. FERGUSON: I might be able to tell you something about that. This spring, there was a meeting held in Washington, at the request of Secretary Forrestal. Representatives were there from the different states. This was par-



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ticularly with regard to blood transfusion associations, and we had no such association in this State. As a matter of fact, none of us individually were members of the national association.

Through concentration and finding out what hospitals have blood banks, we picked Dr. Porter at least as one representative from the State. He was requested, on his return, to form such an organization in this State, so as to line up with the facilities for National Defense in that particular regard.

We, accordingly, had several meetings with the representatives from Lewiston and from Bangor, and we have included Dr. Morrill of the State because of his association with the plasma program.

We have found it of some benefit to ourselves, and decided to form a Blood Transfusion Association.

In conversation between Dr. Wadsworth and Dr. Ames, it was decided that we should seek the approval of this organization before doing that, and that possibly, in addition to having such an Association for technical matters, a Committee might be appointed from this Association, to which any such matters referred to this Association may be taken up.

If it is your wish, I should like to propose that a Blood Transfusion Committee of the Association should be formed, or appointed by the President, and we should like to request the approval of the Association for the formation of a Blood Transfusion Association in the State, which might include some technicians working in blood banks and in hospitals where the doctor was not directing the blood bank.

CHAIRMAN AMES: You have heard this motion, as given by Dr. Ferguson. What is your wish in this matter?

The motion was duly seconded and was carried.

CHAIRMAN AMES: I note by our By-Laws that we are still following the ones we have followed, now, for ten years, and special meetings of either the Association or the House of Delegates may be called by a two-thirds vote of the Council or upon petition by ten members. This special meeting can be posted on the bulletin board, and if at least ten members attend, we can take care of the appointment of the Legislative Committee, according to the By-Laws.

DR. RICHARDS: I move that a special meeting of this House of Delegates be called, and that the time be posted on the bulletin board.

This motion was duly seconded and was carried.

CHAIRMAN AMES: Is there any other business to come before this meeting? If not, before we close, I want to thank you men for coöperating with me and sitting in a group, for these meetings; it has been most helpful, in conducting these meetings.

I feel that we are starting on another constructive year, which marks progress in our Association.

If there is no other business to come before this meeting, a motion is in order to adjourn.

DR. SMITH: I move that we adjourn.

This motion was duly seconded and was carried.

[Whereupon, the Monday Afternoon Meeting of the House of Delegates was adjourned at 6:40 o'clock.]

Special Meeting of House of Delegates

June 22, 1948

A special meeting of the House of Delegates was held at the Poland Spring House, Poland Spring, Maine, on June 22, 1948, at 12.00 noon, with Forrest B. Ames, M. D., presiding. The roll call revealed a quorum present.

This meeting was called to take action on the following resolution which was presented to the House of Delegates in session June 21st.

Be it resolved that Section 3 of Chapter VII be stricken out and the following be substituted therefor: "The Com-

mittee on Legislation shall consist of five members to be appointed by the President."

A motion that this amendment be accepted was duly seconded and was carried.

It was also voted that the Secretary, Dr. Carter, write to Drs. Carl H. Stevens, Oscar R. Johnson and Wilfred J. Comeau, who were ill, wishing them a speedy and complete recovery. Adjourned at 12.05 P. M.

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Notices—Continued from page 374

State of Maine

Board of Registration of Medicine

Adam P. Leighton, M. D., 192 State Street, Portland, Secretary.

List of physicians licensed to practice medicine and surgery in the State of Maine, November 10, 1948.

Through Examination

Dr. Melvin I. Acker, St. Stephen, N. B.
 Dr. Thomas Anton, Portland, Maine.
 Dr. Donald Harper Archibald, Edmundston, N. B.
 Dr. Frederick B. Clark, Portland, Maine.
 Dr. William E. Dionne, Philadelphia, Pa.
 Dr. Maynard A. Meservey, Jr., Portland, Maine.
 Dr. Thomas F. O'Connor, Belmont, Mass.
 Dr. Eugene Reading, Paterson, N. J.
 Dr. Walter A. Russell, New York 21, N. Y.

Through Reciprocity

Dr. Conrad M. Ayers, Howard, R. I.
 Dr. Samuel L. Belknap, Portland, Maine.
 Dr. Richard H. Dennis, Waterville, Maine.
 Dr. Emerson H. Drake, Norwood, Mass.
 Dr. Samuel G. Griffin, Portsmouth, N. H.
 Dr. John E. Hampton, Eliot, Maine.

Dr. Stanley E. Herrick, Jr., Portland, Maine.
 Dr. Harry F. Hinckley, Jr., Bangor, Maine.
 Dr. Loraine Holman, Boston 19, Mass.
 Dr. Otis F. Jillson, Falmouth Foreside, Maine.
 Dr. Mark I. H. Kaufman, Velva, N. D.
 Dr. Harold L. Osher, Biddeford, Maine.
 Dr. Loring W. Pratt, Westfield, N. J.
 Dr. Ivan M. Spear, Yarmouth, Maine.
 Dr. Ernest W. Stein, Douglaston, N. Y.
 Dr. D. Ernest Witt, Williamsport, Pa.

Venereal Disease Clinics

The Department of Health and Welfare, Bureau of Health, maintains facilities for the diagnosis and treatment of venereal diseases in the following locations:

Augusta, Bangor, Bath, Belfast, Biddeford,
 Lewiston, Portland, Rockland, Rumford,
 Sanford, Waterville, Wilton and Winthrop.

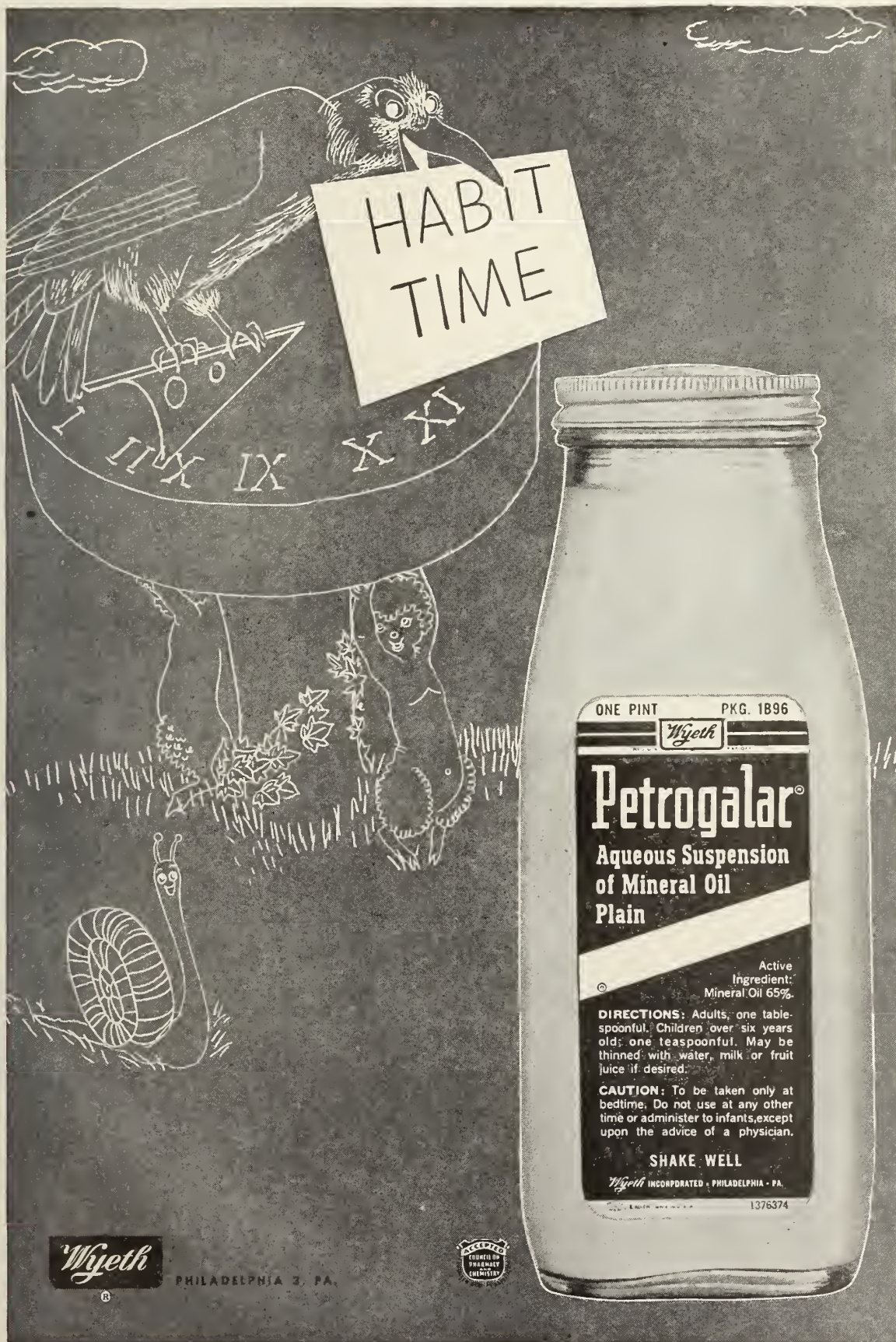
Any physician wishing to refer an indigent person for diagnosis or treatment may obtain the name of the nearest clinic physician by contacting the Department of Health and Welfare, Bureau of Health, State House, Augusta, Maine. If no clinic facilities are available, physicians will be authorized to treat indigent patients in their offices. Authorization should be requested before treatment is started.

HOSPITAL STAFF MEETINGS

Open to the Profession

CITY	HOSPITAL	DATE
Augusta	Augusta General Hospital	1st Wednesday
Bangor	Eastern Maine General	2nd Tuesday
Bath	Bath Memorial Hospital	1st Tuesday
Belfast	Waldo County	2nd Friday
Biddeford	Webber Hospital	2nd Thursday
Boothbay Harbor	St. Andrew's Hospital	4th Tuesday
Caribou	Cary Memorial	1st Wednesday
Damariscotta	Miles Memorial	2nd Thursday
Farmington	Franklin County Memorial	2nd Monday
Greenville	Charles Dean Hospital	2nd Wednesday
Hartland	Scott Webb Memorial Hospital	1st Wednesday
Lewiston	Central Maine General	1st Monday
	St. Mary's General	2nd Monday
Portland	Maine Eye and Ear Infirmary	1st Tuesday
	Maine General	2nd Friday
	Mercy	3rd Thursday
Presque Isle	Presque Isle General	1st and 3rd Tuesdays
Rockland	Knox County General	1st Monday
Rumford	Rumford Community	4th Wednesday
Sanford	Goodall Memorial	2nd Monday
Waterville	Sisters	2nd Tuesday
	Thayer	Every Thursday

The above list was compiled from a questionnaire sent out by the Maine Hospital Association. Additions or corrections will be made on notification to the Secretary, Maine Hospital Association, Thayer Hospital, Waterville.



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**Philip Lewin, M. D., F.A.C.S.
Backache and Sciatic Neuritis,
Chapter XXXIX, Page 580
Published 1943 by Lea & Febiger, Philadelphia*

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